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INTRODUCTORY LECTURE
TO A
COURSE ON PRACTICE OF PHYSIC,
DELIVERED AT
MINTO HOUSE,* ARGYLE-SQUARE, EDINBURGH.

By GEORGE W. BALFOUR, M.D., F.R.C.P.

MODERN THEORIES OF INFLAMMATION.

GENTLEMEN,—There is no subject more deserving the attention of the physician than that of inflammation—a process which, without attempting more accurately to define its frequency, we are safe in saying, underlies by far the larger proportion of those ailments to which the human frame is liable, besides complicating dangerously or otherwise a very considerable number of those cases of disease not actually originated by it. There is no wonder, then, that the nature of the inflammatory process has formed a subject of most anxious inquiry and of eager speculation to medical men in all ages, and the importance of this inquiry and of these speculations, in relation to the well-being of mankind, may be readily estimated by the influence which they have exerted upon medical practice, the treatment of disease having been based to a large extent upon the prevalent theory in regard to the mode of origin, course, and termination of inflammation. It is needless to occupy your time at present by recapitulating the theories of Hippocrates, Galen, and Celsus, of Pythagoras, Chrysippus, and Erasistratus, of Van Helmont, Boerhaave, Hoffman, and Stahl, or even of one so recent as Cullen, the influence of whose teaching has not yet wholly disappeared from our schools. Some of the theoretical queries of these eminent men have been confirmed, but most of them have been overthrown. Not only are many diseases now regarded as inflammation, or as the results of inflammation, to which they would have denied that term, or scorned to ascribe to any such cause, but the very essence of the process is now viewed in such a totally different light from what it was by them, that one of the most distinguished of modern pathologists has likened the term inflammation to a coin without a mint stamp, which ought to be cast aside as only liable to produce error and confusion. The term inflammation is, however, too deeply imprinted in the history of our art to be ever cast aside, and though it be no longer restricted to those diseases in which the parts affected seem to burn or be on fire, and though the *Quatuor Notæ* of Celsus are now-a-days insufficient for its diagnosis, it is not because those diseases or these *Notæ* do not represent inflammation as now understood, but because the light of modern science and of modern pathological investigation has revealed the fact that these characteristic phenomena, even where persistent, are not always accompanied by those structural changes which from time immemorial have been regarded as the results of inflammation, and are not, therefore, always signs of inflammation, while it has also taught us that there are many morbid affections unattended by those phenomena which are yet followed by these structural changes, and to which, therefore, we cannot refuse to apply the term inflammation. Thus far from introducing confusion into our ideas of the meaning of this term, modern science has done good work in giving them precision, and in enabling us, in making our diagnosis, to correct the evidence of our senses by the efforts of our reason.

It has not effaced the stamp from this ancient coin, but has renovated the legend and given it a distinctness which cannot fail to enhance its value both now and in future ages. During this process of renovation our ideas of the essence of the inflammatory process and of the nature of its stages have undergone several changes, and though it seems probable that we are now in the right way of arriving at the truth, it cannot be said that we have as yet attained it, because it is unquestionable that many of our present notions are destined to be remodelled when we attain more accurate ideas of the nature of the anatomical elements involved.*

All our modern theories of inflammation date from the employment of the microscope in pathological investigation, and those of most importance are altogether of recent origin. They are based upon two distinct sets of observations, which cannot be connected, except by a process of ratiocination; and all the discrepancies which exist in our ideas of the process of inflammation arise from the different values ascribed to the facts upon which our reasonings are based. The one set of observations has been made upon the early or initiatory stages of inflammation, as seen when artificially induced in the transparent parts of animals; while the other set has been made upon those structural changes which are universally acknowledged to be the result of inflammation; the connecting links between the two being lost in that universal haze which obscures the most transparent parts so soon as the inflammation has reached a certain height. It is these links which it is the province of our reason to supply, and it is in supplying these that the greatest discrepancies of our modern theories have arisen. Thus we cease to be able to see the inflammatory changes taking place in the transparent tissues of the frog or any other similar animal just at that most interesting point when those tissues become obscured by what seems to be the escape of fluid (exudation) from the vessels into their substance, and the thread of the discourse cannot be again taken up till we meet with the developed results of inflammation upon the surface, or in the organs or cavities of those animals who have suffered from it. And it was a very simple generalisation which led to the supposition that these results were merely the effect of the continuous development of the fluid exudation, its molecular matter being gradually aggravated into granules, nuclei, and cells, which subsequently became ripened into pus or developed into cellular adhesions, the natural tissues of the body remaining passive during the process. Could we have seen this exudation passing through these different processes all doubt as to the truth of this generalisation would have been at once removed, but as this is impossible, these doubts exist, and they are confirmed and strengthened by the fact that there are many cases of undoubted inflammation in which there is no exudation whatever, and in which the cloudy swelling depends solely upon the anormal nutrition of the elements of the natural tissues of the body themselves, leading to the possibility of a still higher and simpler generalisation, that inasmuch as disease and inflammation as one form of it is no new force or entity, but simply "the product of the body itself—that is, of the vital actions always taking place within it," so its results are not the consequence of the development within the body by a *generatio equivoca* of any novel tissues, but are simply the product of the natural tissues of the body itself altered in their development by the nature of the pabulum by which they are nourished, and the change in the vital conditions by which they are surrounded and influenced.

In the further consideration at present of the theories of inflammation, I shall first describe what has been actually observed to follow the application of an irritant to

* Minto House was in former days the town residence of the earls of that ilk; it subsequently was the home of the late Dr. Andrew Duncan, becoming afterwards a private surgical hospital (under the care of Professor Syme). The readers of "Rab and his Friends" will be interested to learn that old Ailie died in an apartment now occupied as a chemical laboratory by Dr. Crum Brown, for that pathetic tale is no fiction, and owes its pathos to the sadness of reality more even than to the gifted intellect of its author.

* Particularly in regard to the canaliculi apparently connected with the connective tissue cells, which some think, and I believe Virchow himself now takes this view, are a separate circulatory system wholly unconnected with those cells. While the doctrines in regard to the protoplasmata now beginning to be promulgated, promise in no long time to revolutionise our ideas.

the transparent parts of animals; I shall next detail the ordinary results of inflammation, and describe the reasonings which have been employed in the explanation of the etiology of these results, as well as of the ordinary termination of inflammation. On the application of an irritant, such as a drop of alcohol to the web of the foot of a young frog, the blood at first flows more rapidly than naturally through the capillaries, then sways to and fro, and finally ceases to circulate—the capillaries becoming densely congested or filled with these stagnating corpuscles, some of which occasionally escape through rupture of the vascular walls, while the intra-vascular spaces of the web become thickened, clouded, and more or less opaque, partly by the action of the alcohol, and partly by the effusion of the liquid plasma—this opacity first occurring in the neighbourhood of the vessels and subsequently spreading through the whole intra-vascular space—the opacity thus induced precluding further observations. Such are the phenomena ordinarily observed on the application of an irritant to the transparent parts of animals; but the mere observation of these phenomena gives us no clue to the etiology of inflammation; to attain any true idea of that we must endeavour to obtain correct notions as to the causation of each separate step in the sequence, and in order to attain this we must first ascertain the anatomical structure of the tissues concerned. The most important of these are, of course, the capillaries and smaller arteries; both we know to be extensile, but after a different fashion. For the capillaries are formed by only one delicate homogeneous membrane, beset here and there by nuclei, elastic but not contractile, incapable, therefore, of complete closure, but presenting divers variations in their calibre explicable by the differences in the distending force of the current of blood. While the minute arteries, on the other hand, some of them much less in size than average capillaries, are all possessed of three coats—viz., an external layer of cellular tissue in variable quantity, a delicate internal membrane, and an intermediate circular coat, consisting of a single layer of muscular fibre cells, wound spirally round the internal membrane. The capillaries, therefore, are from their structure, elastic, but non-contractile, while the arteries even in their minutest subdivisions are highly contractile, and may be constricted even to absolute closure. When this constriction is extensive, the blood moves very slowly through these arteries, and when it is complete, they, as well as the capillaries and veins, become so apparently exsanguine as to be with difficulty distinguished from each other, and the web of the frog's foot appears as if it possessed no blood-vessels at all, presenting an appearance precisely similar to the death-like pallor of the human cheek in syncope, or to the dead whiteness of the human fingers when benumbed with cold. This is that spasm of the extreme arteries so much insisted on theoretically by Cullen as the initiatory stage of inflammation, and which has been actually observed as such, both by Lister and Wharton Jones, while its causation is unquestionably due to the reflex action of the nervous system, an action first insisted on by Whytt, Hoffman, and Stahl, and has in recent days been illustrated in a very interesting manner by a curious experiment, first performed by Drs. Brown-Sequard and Tholozan. These gentlemen found that on plunging one hand into ice-cold water, the other fell in temperature—in one case so much as 22° F., but generally from 6° to 8°—and this did not arise from any diminution of the general temperature of the body, because that, as measured by the temperature of the mouth, was never lowered more than 1°, and when the loss of temperature of the hand not plunged into water was greatest, it actually did not amount to more than one-fifth of a degree. But it is *a priori* evident that the chilling of the hand kept in the air must depend upon one of two causes—either the arrival in it of a cooler blood, or the diminution of the amount of blood naturally distributed to it. The first supposition is, however, excluded by the fact just alluded to, that the temperature of the general mass of the blood is very little, if at all, reduced, and we are therefore forced to conclude that the amount of blood sent to the hand is diminished, while as the heart continues to send perceptibly the same amount of blood, we are irresistibly led to conclude that the blood-vessels in the hand are anormally contracted by the reflex influence of the nervous system, there being no other mode in which that action can be produced, and the efficacy of this being capable of still further, and more exact, illustration by various experiments upon the nervous system, into the details of which we have not at present time to enter. This reflex contraction of the arteries is sometimes so great that not a single drop of blood escapes from their divided extremities, and the power of producing it through the nervous system is largely made use of in the treatment of certain forms of hæmorrhage; its influence in the production of inflammation I shall point out presently, when I have said a few words as to the state of the blood as observed when circulating in inflamed parts. But first, I must say that this state of pallor and bloodlessness of the parts, though it may be and often is the precursor of inflammation, is yet not inflammation any more than is the fullest dilatation of the arteries and capillaries which may succeed this condition, or may be directly produced by section of the sympathetic, which, though attended by the passage of a much larger amount of blood than natural, by increased rapidity of nutrition, and a greatly increased development of heat, is yet unattended by any strictly morbid phenomena. When, however, this constriction of the arteries has been maintained for some time, or has been repeatedly brought about at short intervals on the same spot, other phenomena begin to show themselves. The liquor sanguinis still passes on freely, but the corpuscles lay behind; they adhere to one another, and their motion being thus obstructed, while the vis a tergo continues acting, they cram the dilated capillaries with a mass of adhering corpuscles oscillating to and fro, and moving slowly onward, apparently as impelled by the heart's action, and when they finally reach the veins or some healthy anastomosing capillary, they pass into them in the form of broken clumps or masses, which sometimes project into these vessels, and move to and fro in the current of healthy blood for a few moments before they are swept away in its torrent, within which this peculiar adhesive tendency speedily disappears. This stage is termed that of inflammatory congestion or stasis; and the peculiar tendency of the blood corpuscles to aggregate together and adhere to one another constitutes no unimportant element in its causation, constituting, moreover, a practical illustration of that lentor or viscidity of the blood, which Boerhaave supposed to be the cause of inflammation, but which is really only one of its stages, and of purely local—not of general origin, as he supposed. The production of this peculiar condition of the blood corpuscles is supposed by one set of observers to depend upon an increased mutual attraction between them and the surrounding parenchyma; but this is denied by another set, who very properly point out that this adhesion of the blood corpuscles can hardly be regarded as a vital property, inasmuch as while it is never seen in the normal condition of healthy blood, it is not only instantaneously developed when a drop of blood is brought into contact with inert or dead matter, as when it is shed upon a piece of glass, the blood running instantly into rouleaux, formed by the discs adhering to one another by their flat surfaces, in net-work fashion, but also continues to present itself for a long period even after all the fibrine has been removed, and the blood corpuscles have been pickled in gum. In one such case this peculiar property was observed so long as twenty-four days after the blood had been separated from the body; but properties formed by blood corpuscles so long removed from the body, and so altered in appearance by the gum can hardly be imagined to be vital. Unquestionably, however, as is shown by other experiments, very slight changes in the chemical condition of the plasma in regard to viscidity, &c., are capable of apparently influencing the production of this peculiar adhesivenesss, but it is

equally unquestionable that the great change which takes place in inflammation consists primarily in the abolition of the relations normally subsisting between the blood and the tissues, in which condition the blood in the vicinity of the disabled tissues assumes the same character as when in contact with ordinary solid, dead, or inert matter, and thus becomes unfit for transmission through the vessels. This peculiar effect upon the tissues may be produced directly or indirectly through the nervous system. In the latter way—indeed frequently in the former, but always in the latter—the first effect is the production of a constriction of the arteries which prevents more or less completely the circulation of the blood through the part, throwing the tissues affected therefore into a state more or less akin to molecular death, which may however be, if not too long continued, perfectly recovered from without any ulterior results taking place; and when this recovery takes place under the influence of treatment, this is what is termed cutting short an inflammation, though more correctly speaking it only checks the process which would lead to an inflammation, or the tendency to it. We see then that in this view of the nature of inflammation it is simply a healthy action following an injury done to some tissue or organ, directly or reflexly; it is the natural and vital reaction of the organism to an injury received; it is, as has been well said by Mr. Hinton, the restoration of a life that has been lost; it adds to vitality, nor detracts from it; loss of vitality is its starting-point, but not its essence. This idea of the nature of inflammation is essentially solidism, as opposed to the doctrines of humoralism, which imagined a quantity of peccant matter—in this case the fibrine—to be accumulated in the blood and to become deposited upon or into certain organs, on the principle of rubbish shot here. But it is essentially a vitalistic or dynamical solidism. Beyond this point—that of stasis, or complete congestion, it is impossible to follow the process of inflammation any longer with the eye. Even the most transparent tissues become opaque and obscure, by the transudation of the liquor sanguinis more or less deeply coloured by the partial escape from the blood corpuscles of the red colouring matter. Occasionally the vessels burst and extravasation of the blood corpuscles takes place through the rupture, and the theory of inflammation as a morbid process is from this point onwards simply a mass of more or less plausible conjectures.

To bring it even so far many years of careful observation have been required, and much thought has had to be expended in the connection of these observations. As an apt, and in many respects a most interesting illustration of this, I may refer to what Kaltenbrumner, one of the earliest microscopical observers, fancied he had seen in relation to the black pigment contained in those stellate cells which dot the surface of the frog. He fancied that direct absorption of the natural tissues formed part of the inflammatory process, and supposed himself to have been lucky enough to catch the exact moment when the torrent of the circulation had detached a particle of colouring matter from one of these stellate rays and carried it away, and this he thought was an example of the mode in which these stellate rays become reduced to mere scattered black specks. More careful and accurate observation has taught us now that the pigment in these cells is not thus removed, that in fact it is not removed at all. Like every other part of the body, these pigment cells and their contents are under nervous influence; any irritation or excitement causes the pigment to concentrate round the central nucleus, leaving the skin pale and dotted with black points, but when the irritation is sufficient to produce nervous paralysis, the pigment remains unconcentrated in its original stellate form. The apparent disappearance of the pigment from the rays of the stellate cells is not therefore caused by absorption and removal by the blood, but is the result of concentration caused by the same nervous action which produces the contraction of the smaller arteries with which it is coetaneous, while the arterial relaxation and simultaneous vascular congestion is accompanied by a diffusion of the pigment in the cells, both being caused by the cessation of nervous action. These peculiar motions of the pigmentary granules, therefore, besides being a measure of the accuracy of modern observation, are also a further proof of the importance and far-reaching character of nervous action, and the history of their discovery furnishes an excellent illustration of the necessity of basing our reasonings regarding any process not upon partial and limited observations restricted to one form of tissue, or anatomical element, but as far as possible upon all which are within the same sphere of vision, observations made on one tissue being capable of connecting or strengthening the opinions formed from observation made upon some other. Inflammation, then, so far as it can be seen, consists in a precursory stage in which the smaller arteries are so greatly constricted that the part is often rendered wholly exsanguine; in man it is probable that this stage is coetaneous with the primary rigors. This stage is wholly unattended by any alteration in the condition of the blood corpuscles, the vital properties of the tissues still remaining unaltered. The second stage is attended by a dilatation of the arteries and capillaries, which are crowded with blood corpuscles still rolling over one another freely, and behaving as in health. This is the stage of reaction; and the third stage, that of stasis or congestion, which some call the first of inflammation, is evinced by a close aggregation and adherence of the blood corpuscles to one another, the aggregated mass passing onwards with difficulty into the veins or healthy anastomosing vessels. This stage is only produced by long continuance, by repeated application, or by relative severity of the exciting cause, and is characterised by a behaviour of the blood corpuscles precisely similar to that which they present when effused from the body or surrounded by dead and inert matter. Observers, we have seen, are now-a-days tolerably well agreed as to those facts, though, as I have already shown, they differ materially as to their explanation, and the case is no otherwise in regard to the results of inflammation. To spare time I shall confine your attention for the present to three acknowledged results of inflammation—results in which we take up anew the leading clue of our theory, the intermediate steps being lost in obscurity, as I have already pointed out. The three results to which I shall at present confine your attention are—fibrinous exudation, suppuration, and ulceration. No one doubts the existence of these results as the consequence of inflammation; the means by which they are attained is still, however, a matter of dispute. The more ancient theory supposes that the exudation of the liquor sanguinis is caused by a morbidly increased attraction of the tissues for it. This exudation is then supposed to coagulate, and that it then passes through various transformations which are supposed to favour its escape from the body or its development into certain morbid tissues, these transformations being produced within itself, the exudation when it lives constituting a molecular blastema, within which, by the aggregation of molecular matter, cells and fibres are formed, according to the nature of the exudation. When suppuration takes place, these molecules aggregate into cells, which gradually develop into pus cells, these when ripe falling to pieces, and being either removed by absorption or otherwise escaping from the body. This theory of inflammation regards it as in its essence and in its entire course essentially a morbid process, the exudation taking place by means of a morbid and anormal attraction, and then becoming developed in various ways by a *generatio equivoca* of cells and fibres which develop themselves out of molecular matter. The other theory, which is that recently put forth by Virchow, but founded on observations and reasonings long since made by Professor Goodsir of this city, while acknowledging that, under certain circumstances, effusion of the liquor sanguinis does take place, looks upon this not so much as an exudation as an educt from the vessels by the attraction of the tissues, and the mode in which this is produced is regarded

as essentially different from the ordinary theory of exudation. In order to explain this supposition, we must remember that there are many inflammations of mucous membranes in which there is no fibrinous exudation whatever, and though in croup, for instance, we have fibrine effused in its later stages, in its earlier ones we have nothing but simple mucus. The same is the case with various other mucous membranes, some of them being more easily, others with more difficulty brought to effuse fibrine; but unless we strike all these catarrhal inflammations entirely out of the category of inflammation, for which there is no sufficient reason, we must acknowledge that there are inflammations with mucous exudation, as well as inflammations with fibrinous exudation, but we know that mucus does not exist in the blood, and is not therefore simply a transudation of the liquor sanguinis, but is the product of the mucus glands—their secretion. It is often secreted in enormous quantities, and washed out upon the surface of the membrane by the liquor sanguinis which transudes. In like manner fibrine, though it differs from mucus, in being indeed present naturally in healthy blood, and in greatly increased quantity, when the blood is, as it is said to be, inflamed, is not to be regarded when it is found aggregated in any spot, as a localisation from the blood, as an exudation, or transudation from the blood at that spot, but rather as a local product, as much a secretion as mucus is, and the increased amount of fibrine in the blood is not the pre-existing and dyscrasic cause of an inflammation, but is the result of the poisoning of the blood by the re-absorption of this local secretion. In proof of this, Virchow points to the fact that in all those cases which are characterised by the existence of a largely increased amount of fibrine in the blood, evinced by what used to be called the crusta phlogistica, or buffy coat, the inflammation affects organs richly provided with lymphatics and closely connected with large masses of lymphatic glands, while the inflammation of all those organs which contain few or no lymphatics, has almost no influence upon the blood in the way of increasing its fibrine. Inflammation of the brain, for instance—an organ which contains scarcely any lymphatics, has long been known to be unaccompanied by any phlogistic crasis, or increase of fibrine in the blood, while this is specially and largely increased in disease of the respiratory organs, which contain an unusually plentiful network of lymphatics, not only in the lungs, but in the pleura also, while the bronchial glands represent almost the largest masses of lymphatic glands possessed by any organ in the body. Further, though certain organs, as the serous membranes, secrete fibrine on the application of the very slightest inflammatory irritation, others, such as certain mucous membranes, secrete mucus on the application of a slight inflammatory irritation, and fibrine when the irritation is greater. Thus, croup is originally a mucous inflammation, at first the pseudo-membrane is a mere layer of mucus or muco-purulent matter, and after a certain time and the gradual increase of the inflammation the fibrinous secretion or so-called exudation takes place in such a manner that when we follow the succession on a piece of false membrane we have one portion which is pure mucus, and one which is pure fibrine, and an intermediate layer which is neither one nor the other. Moreover, following Goodsir Virchow disbelieves in the power of simple molecular aggregations to form cells; he believes that no cell is ever formed except by continuous generation from another cell, that all new formations originate in the natural structures of the body; and that the great source of most of these new formations, and especially of the pus cells, is the nucleated structure of the connective tissue; and he points out that if we carefully wipe off all the purulent matter from the surface of a sore, and then see what exudes, we get either pus or simply a serous fluid. There is no primary deposit of a fibrinous layer or blastema in which the pus becomes developed by the gradual aggregation of the molecule, but it is developed directly from the nucleated cells of the connective tissues, and escapes as it is developed. Such is a general outline of the two great theories of inflammation prevalent in our day. I need scarcely say which appears most probable both from theory and from a due consideration of all the facts. It can hardly be supposed that a *generatio equivoca* is any more likely to be true in pathology than it is in physiology, while, did your time permit, I could show, as I presently shall, that the pathological history of the blood in cases of inflammation points to the existence of some continuous source of development of the fibrine; that is, it does not exist in any unusual amount in the blood previous to the commencement of inflammatory action, and ceases to be observed after it is exuded, as the crasic theorists would lead us to believe, but it is developed *pari passu* with the exudation, and gradually disappears or returns to its normal state as convalescence returns. The most modern theory of inflammation does not therefore regard fibrinous effusion, which is a well-known ultimate fact in the inflammatory process, as an exudation of a highly-organized or organizable elementary tissue, but simply as a secretion by the natural tissues, which finds its way back into the blood by re-absorption; further, that this fibrine or coagulated lymph is never transformed by molecular aggregation into connective tissue or pus cells, but is always more or less slowly absorbed—the fluid parts disappearing first, the more solid at a later period; the absorption being aided by the proliferation into it of the adjoining layers of connective tissue cells which subsequently form those cellular adhesions, so commonly met with, as the ultimate result of fibrinous effusion. 2nd. Pus is not now regarded as the product of molecular aggregation in a semi-fluid blastema, but, as in physiology we have no new development beginning *de novo*, but one animal or one plant proceeds from another by the eternal law of continuous development, which knows no exception, so in pathology, there is no exception to the minor proposition of *omnis cellula e cellula*, and pus when found in any situation is to be regarded not as anything extraneous or foreign to the organism, but merely as a peculiar morphological development of the cells naturally existing there. When a uterus is prolapsed we know that the juvenile mucous corpuscles become developed into, not mucous corpuscles, but horny epithelial cells. These epithelial cells are incapable of being transformed anew into mucous corpuscles, but on the replacement of the uterus are thrown off and replaced by a fresh development of true mucous corpuscles from the basement membrane. But those juvenile elements, which may thus become either mucous or epithelial cells, may also, when developed under peculiar pathological conditions, exhibit very early that tendency to subdivision of their nucleus which stamps them as pus cells. Pus, mucous, and epithelial cells are therefore, though not identical and quite incapable of passing into one another or performing the functions of one another, nevertheless pathological equivalents which may, under certain circumstances, be substituted for each other, and which may be developed from one and the same elementary basis. In like manner, when found in the interior of organs, the source of pus is to be found in the cells of the connective tissue, the nuclei of which subdivide under the influence of the morbid nutrition which they receive and develop themselves into pus cells instead of into ordinary connective tissue cells.

Thus we have two forms of inflammation—first, the parenchymatous, in which the process is carried out within the tissues, and the secretive or exudative, which chiefly affects the surfaces of organs, and in which there is a considerable escape of fluid from these surfaces, forming fluxes when it takes place upon a free surface, as on a mucous membrane—coryza or diarrhœa, as the case may be—and when it takes place into a cavity, as that of the pleura or peritoneum, we have the phenomena of inflammatory dropsy. The two processes are precisely similar—the one flux taking place from a free surface, the other into

a shut sac; the so-called exudation is therefore found in the one case in the spittoon or the close stool, and in the other within the cavity affected—a slight irritation of the mucous membrane leading to increased secretion of mucus, and of the serous membrane to an increased secretion of serum, a greater irritation of either complicating their natural secretion by a morbid secretion of fibrine; and leading ultimately to the proliferation of the mucous or connective tissue cells as pus in the one case and as fibre cells or pus cells in the other, according to circumstances.

From the days of Hunter the process of ulceration has been referred to an increase of absorption over deposition—a purely theoretical idea, incapable of proof, and also inconsistent with many of the facts observed—such, for instance, as the discharge of disintegrated portions of tissue, &c. It has also been referred to the corrosive action of the purulent matter, an action which has been conclusively disproved by steeping bones, &c., for weeks in suppurating cavities, after which it was found they were rather heavier from absorption than lighter from corrosion, and that no softening had taken place except that produced by putrefaction. A more recent view of ulceration is that it is caused by the slow exudation of fibrinous matter, which from the cachectic state of the constitution exhibits an indisposition to active development, and only acts by compressing the parts, more or less obstructing the circulation through them, and thus causing the gradual death and discharge of the parts affected, differing chiefly from gangrene in being more slow in action, in affecting smaller portions of the frame at once, and in the process being gradually repeated as the ulceration extends. The more modern view is entirely different, and apparently more rational. It may be thus explained:—In the natural state of the skin or mucous membrane, the upper surface we know is continually disintegrated and removed by the action of the various external influences. In health these elements are continually renewed by the continuous development of fresh mucus or epithelial cells from the basement membrane. In inflammation, however, it is precisely these young elements, which ought to become thus developed, that are transformed into pus cells, and as the epithelial surface becomes worn away, the collection of purulent matter which has been gradually forming by the rapid subdivision of the young cells, and by the effusion of serum into the intercellular spaces, gradually reaches the surface, the abscess ripens, and finally bursts; the pathologically metamorphosed juvenile elements are thrown off, and the process gradually extends into the submucous or subcutaneous connective tissue cells, and in this manner ulceration or breach of surface takes place, and this takes place all the more readily the thinner the layer of juvenile element is. In mucous membranes with cylindrical epithelium, therefore, in which this layer is very thin, it takes place much more readily than in those in which the epithelial layers are flatter and denser. In the former class of membranes suppuration hardly ever takes place without breach of surface; in the latter, as in the urethra, copious suppuration often takes place for a long time without any breach of surface.* It has not yet been discovered whether the cells of muscle or of other organs are capable of being transformed into pus cells—it is not requisite that they should be—and it is almost impossible to ascertain if they can be, because the connective tissue is so inwoven with every organ of the body that its cells are everywhere present. The amount of destruction caused by the apparent solution of the tissue produced by the suppuration, depends upon the amount of fluidity attained by the organic matter surrounding the young elements. When this remains tolerably firm only granulations are developed; that is, those proliferations of the connective tissue cells which increase in size by the subdivision of their nuclei, before their escape as pus cells, remain visible on the surface of the sore; as the suppuration gradually ceases these contract in size, gradually pulling together the surrounding healthy tissues, and becoming themselves partly developed into simple fibre cells, thus constituting the cicatrization of the sore—a process which was formerly supposed to be due to the renewed effusion of lymph, which became transfused partly into pus and partly into primary cells, becoming fibre ultimately, and thus constituting the cicatrix. Thus we see that the great difference between the modern theories of inflammation and those which, though less recent, can yet not be called ancient, is that while the latter calls in on all occasions the agency of a process termed exudation, and of a morbid material termed lymph or fibrine, which compresses the natural tissues and causes their death and destruction, or itself becomes developed by a *generatio equivoca*, and under the influence of unknown circumstances, into the pus cells of an abscess, the connective tissue of an adhesion, or the fibres of a cicatrix, the former deduces all their morbid elementary forms of tissue from the juvenile elements of the existing tissues, which under certain morbific influences become metamorphosed into structures, which though far from being identical with their natural physiological form, are yet the pathological equivalents of these forms, developed for certain wise purposes, and in accordance with certain laws, the nature of which is as yet unknown, but which are unquestionably framed for the protection and preservation of the organism, under the peculiar circumstances of its present existence.

The tendency of all modern thought is to assure us of the truth of the latter and more recent view of the inflammatory process, which also receives very important support from the results of enlightened treatment. But into all these matters we must subsequently go more in detail; it is enough for the present to have shown, somewhat cursorily, that inflammation is no morbid novelty, but merely the result of the natural laws of vitality, and of the ordinary growth of tissue, operating under certain anormal conditions.

* We can readily understand that small fragments of the tissue get broken off, and occasionally washed out with the discharge, and that when the ulceration affects the bones the insoluble calcareous matter is found mixed with it.

PUBLIC HEALTH AND SANITARY REFORM,

DELIVERED BEFORE THE DUBLIN STATISTICAL SOCIETY.

By Sir R. J. KANE, M.D., F.R.S.

(Continued from p. 564, Vol. ii., 1866.)

MYSTERIOUS and complicated as are those phenomena, analogous to fermentation, by which it is supposed that certain contagious or zymotic diseases are produced, that process does not suffice to explain all the circumstances under which disease is communicated, and we are obliged to admit that in many, and in some of the gravest instances, morbific influences are propagated through the agency of beings of a higher organization. Science has demonstrated that man and other animals are themselves the material means and pabulum of existence to myriads of beings more or less minute, and of which, in many cases, we can only infer the existence from their lamentable effects. That probably every living organism is itself truly a microscosm, a world in itself, in which infinite series of lesser organisms live and die, carrying in their life or in their death the elements of disease and inevitable decay to the being in which they have been formed. We thus may recognise among the maladies which are known as infectious or contagious the two groups of fermentative and of parasitic diseases; of the former we may regard small-pox as the characteristic type, with probably oriental plague and the cattle disease, from whose ravages this country has so far fortunately escaped. In those the virus may be transferred by inoculation, and acting on materials naturally existing in the blood, generate by a fermentative action, matter of the same kind, which often tends to eliminate itself from the system under various

external forms. Not so easily explained as results of fermentative action are the phenomena presented by the spread of the contagion of Asiatic cholera and typhus fever. Those terrible pestilences appear to inflict their ravages by further means, and many phenomena appear to lead to the belief that those and some similar forms of disease are generated by means of minute beings, which, being diffused through the atmosphere, settle down on certain places, or on certain individuals, in a most irregular and anomalous way, although in all cases favoured by want of cleanliness, drainage, and ventilation, and often directly supplied through water and through communication with diseased persons or places. Such diseases do not admit of being directly reproduced by inoculation, nor can, in most cases, any distinct virus be exhibited; but this is probably due to the imperfection of our means of investigation, and not to any real distinction in the two classes of disease. The transference of such organic germs is illustrated by the curious form of fever which has been epidemic for the last few years in Central Germany, and which has been traced to the development in the muscular tissue of the human body of a microscopic worm, the *trichina spiralis*, which obtains entrance from diseased meat, especially pork, having been used as food. In this extraordinary disease, every part of the muscular tissue becomes infested with this minute animal, and a small bit of diseased muscle, if inserted in the muscle of a healthy animal, transplants the parasite, which then lives and multiplies in its new position, to the imminent risk of the individual who has afforded it a home. It may interest some of my friends here to know that this little worm, although showing utter indifference to every kind of drug, has an intense dislike to alcohol, and the only individuals in Central Germany who have been latterly able to eat diseased meat with impunity have been those reckless individuals who washed down their roast pork and sausages with copious libations of corn brandy.

From the more definite knowledge of the nature of contagious influences which those observations will serve to indicate, it is apparent that in placing cleanliness, personal and domestic, at the head of the means for preventing or checking the spread of disease, I but carried out the strict principles of science. Every collection of filth, every space occupied by stagnant water or often respired air, becomes a favourable position for the growth and diffusion of those germs of infection. By their being diluted and removed by fresh currents of air, by frequent ablutions, and by drainage, their power to do evil is abated if not destroyed, whilst the freshened energies of life conferred upon the system by the action of those sanative means, enable the organs to resist and to reject those morbific influences to which otherwise they might have succumbed. To those means of resisting disease, however, we need not be necessarily restricted; we may call in the assistance of science in another form, and not merely removing the infectious matter, we may altogether destroy and decompose it by means of suitable disinfecting agents.

Under the name of disinfectants are, however, often confounded two different classes of agents which it is very important to distinguish: Those which merely disguise, and those which really destroy the morbific matter. So invariably are filth and disease associated that the fœtid emanations, which cleanliness and ventilation would soon remove, are often confounded with the actual substance of contagion, and it is thought that by perfumes and fumigations which can overpower by a stronger smell the fœtor of dirt and sickness, the danger of infection can be removed. This has often proved a fatal mistake, although often also it has acted beneficially by inspiring confidence and exalting the vital force which then was able to escape occasions of disease, under which otherwise the system might have sunk.

Nothing can be considered as really a disinfectant but what can actually destroy the organic germs upon which the propagation of disease depends. Of such bodies chlorine is by far the most available, and the most powerful. The direct decomposing action which it exercises on all organic bodies, and the consequent destruction of all vitality in organic germs, such as might propagate disease, renders it the most valuable agent for sanitary purposees that we possess; whilsl the facility with which it can be applied in various forms, as gas, as liquid, and in solid combination, enables it to be adapted to the most varied circumstances. It is only necessary to avoid the liberation in any confined space of such a quantity of chlorine gas as might affect respiration, or produce irritation of the lungs; and this is easily done. Gaseous chlorine when respired has no other injurious effect; it is not in any way poisonous. Many other chemical agents which combine with or decompose organic bodies are also excellent disinfectants, as sulphurous acid, and especially permanganate of potash: this body, which is a very powerful oxidizing agent, is now very frequently employed to detect the presence of abnormal quantities of organic matter in air or water. In fact, any substance which is capable of arresting fermentation by destroying the vitality and energy of the organisms which constitute an active ferment, will, for the same reason, arrest and destroy the matter of contagion.

These disinfecting agents, chlorine especially, have the property of destroying foul smells by the same process, of changing the nature of the fœtid material, and generating other bodies which are free from practical inconvenience. They are therefore very usefully employed for the purpose of deodorizing or disinfecting, those words being popularly considered synonymous, the sewage and other similar materials which should otherwise become offensive nuisances. It is, however, very necessary to distinguish between these two actions: an atmosphere apparently pure and bright may be loaded with typhoid emanations; a water clear, fresh-tasting, and sparkling may be infected with the cholera poison derived from drainage through the soil from the neglected sewage of neighbouring infected places. On the other hand, the air of a chemical laboratory, or of a manufactory, may be offensive from the escape of ill-smelling gases or vapours, and yet be totally incapable of producing contagious disease. An atmosphere may, however, be injurious to life from the presence of directly poisonous gases independently of any power of producing contagious disease; and may thus be vitiated by overcrowding, by exhalations from cellars and pits, by the proximity of lime or cement kilns, which diffuse the poisonous gases, carbonic acid, and carbonic oxide. Such air may be rapidly fatal if respired, and yet present no sensible indication of the danger. On the other hand, although sulphide of hydrogen is extremely poisonous when respired, such is the disgusting smell and taste of air containing even one ten-thousandth part of its volume of that gas, that attention is at once called to its presence, and the danger may be avoided. By means of chlorine this poisonous gas is at once destroyed, other compounds being formed which are free from any injurious properties.

A very interesting subject has been discussed lately in relation to the salubrity of the atmosphere, in which a peculiar material termed ozone has been supposed to play an important part. You will find an excellent *resumé* of what has been suggested regarding this ozone in the Lectures on Public Health delivered by Dr. Mapother. It is certain that the free open air of the country, and particularly near the sea, presents to re-agents many of the characters which belong to ozone, or rather to the presence of an oxidizing agent, for the ozone itself is believed to be a modification of the natural oxygen of the atmosphere, and that this oxidizing or ozonic re-action of the air is lost or absent in air which has been often breathed, or that is vitiated by the emanations of decomposing organic matter. It is hence pretty certain that air presenting the re-actions of ozone is purer and better suited to support energetic life than the air more or less foul which does not show this re-action; but whether this

oxidizing re-action in the air is in reality due to the presence of ozone has been latterly more and more called in question. The same re-actions are produced by the presence of minute traces of nitric and nitrous acids. These bodies are continually generated in the air by the unceasing disturbances of electrical equilibrium. The gradual oxidation of organic matter which takes place on the surface of the soil, and in the air itself, also generates those acids, and their quantity in the atmosphere is usually such as to fully explain the re-actions which have been attributed to ozone. I do not myself express an opinion on the subject; I only give the results of chemical inquiry so far as it has yet been carried on. It is, however, certain that the air itself is constantly and powerfully converting the effete organic residues of animal and vegetable life into the materials from which new forms of animals and plants are to be produced, and that thus the never-ceasing cycle of vitality ordained by an all-wise Providence is harmoniously carried on—the close of one phase of physical existence supplying the materials from which the substance of the plants and animals of a succeeding generation are to be formed.

This is no merely abstract or speculative principle. The successive utilization of the same material elements in the formation of successive phases of organic life is the basis of practical agriculture; on it rests the whole science of the application of manures. It has the most direct influence on the economy of large cities and on the prosperity of nations; for there is little doubt but that after allowing for the moral and political agencies which contributed to the destruction of the great empires of antiquity from Babylon to Rome, no insignificant element is to be found in the impoverishment of the neighbouring territories, the produce of which was consumed within the great cities without any equivalent being returned to the soil. Hence those lands became finally incapable of supplying food, and the population became dependent on the produce of distant countries, with which a political connection unstable and precarious could not permanently be maintained.

On a smaller scale the same process is going on in modern nations, and indeed with an accelerated pace among ourselves. Every country which is an exporter of food, diminishes by so much its power to produce food. The mineral elements of food, the earthy phosphates of which the bony skeleton is composed exist in the soil, but only to a limited extent, and the supply should soon come to an end if not compensated for by the restoration of as much of the same material under the form of manure. In new countries according as the soil of one district becomes exhausted, the cultivation passes to another, but even in America this can no longer be easily done. With us it is of course impossible, and we must bear in mind that for every ton of bone that we send out of the country we are so much poorer in capital, unless we replace it by a ton of bone brought from some other source. Hence the influence of a large city like Dublin is necessarily to impoverish the soil of the surrounding districts, unless means be taken to restore to the soil the residual materials of the food which has served for the support of the inhabitants. The question of sewage, to which I have already referred in connection with the means of health and cleanliness, assumes thus additional importance when considered in relation to restoring the productive powers of the soil. The utilization of town sewage, however, must depend for its practicability on many complex conditions as to form and locality, upon considerations not merely of chemical and engineering skill, but also of financial prudence. Into those matters it would be impossible for me te enter; as regards this city the subject is in the hands of the municipal authorities, assisted by eminent professional opinions, and from what I have seen of the plans recently under consideration, I have no doubt that before very long we shall see our river and its quays restored to their primitive salubrity, whilst what is now a source of defilement and disease, will afford the means of reclaiming new lands to profitable cultivation, and afford new sources for the supply of food.

I have thus endeavoured to explain in a simple form the general principles of sanitary science, as constituting the third branch of the business of this Society. We have seen that a large class of those diseases which are most destructive, especially to the poor, are in a great degree preventible, by the adoption of simple hygienic means, by cleanliness, by ventilation, and by the use of those disinfecting agents which science teaches us to employ. In the foregoing remarks I have not adverted to that which lies at the basis of all sanitary requirements: the means of providing for the people a proper supply of food. Good and sound nourishment is in itself a powerful sanitary agent, enabling the system to resist tendencies to disease, under which, with a lower standard of living, it would have sunk. So direct is the connection between zymotic disease and want of food that the term famine fever has been adopted in medical classification for that form of epidemic of which in 1847 we had in this country so fearful an example—we must not, however, now enter into that subject. The means for providing the people with good and abundant food is to be found in facilitating the access of the people to industrial employment, and rendering that employment grateful by securing that the worker shall enjoy the product of his toil. In such form, however, the question touches upon matters belonging rather to the practical statesman than to the statistical inquirer, and on which it would be unsuitable for me to dwell.

In another aspect, however, the influence of sanitary conditions on the material and financial conditions of the working classes may legitimately be considered here. In no way is the suffering from sickness more severely felt than in the destitution which almost invariably attends the protracted illness of the bread-winner of a family, and the consequent loss of the weekly wages upon which the support of a wife and children usually depends. The inevitable reduction in the amount and quality of food; the absorption of any little fund of savings which the providence of better times had formed; the pledging of the little stock of furniture and clothing; the gradual sinking into destitution, and the loss of energy and hope which throws the family into the conditions most conducive to the still further propagation of disease. It is true that in most of the trades benevolent societies are organized, from which, when properly conducted, great benefits are derived, and much assistance is afforded to their members suffering from sickness; but the sphere of action of such societies is still very limited, and the actual loss of money capital, not to speak of physical suffering and moral depression, consequent upon the spread among the working classes of preventible diseases, presents proportions well calculated to arrest attention when we submit it to inquiry.

My friend Dr. Mapother has very kindly obtained for me some returns illustrating the proportion of time lost through sickness by the working men in various employments in this city. Those estimates, into the details of which I need not enter here, as I hope the subject will be brought fully under the notice of the society at another time, represent the proportion of illness under the circumstances which render it a minimum, as in those employments no absolutely sickly person would be retained. It appears, however, that the average time during which a workman is prevented from earning by illness is from four to twelve days in the year, or as we may take it 2½ per cent. of the whole period. Now as there is estimated to be in Dublin of the classes living upon wages 100,000 individuals, we may judge how great, even when taken at its lowest average rate, must be the actual loss in money to the working classes, and consequently to the State, from illness of which, as one-fifth of the total deaths are estimated to result from zymotic diseases, a large part could be avoided by the adoption of sanitary precautions.

But the amount of money measured in this way represents but a very small part of the injury to society, and

loss of capital which results from the spread of disease among the working classes. I have mentioned in the early part of this address that the mean value of life in this country is forty-one years, which signifies that every child born may be expected in average to live so long. But if the perils of childhood have been escaped, then the value of life becomes much greater, and a person who has arrived at manhood in health, may be expected in average to survive to the age of sixty-three years. This should allow of marriage, and of the children being reared until the youngest was able to earn its subsistence, and under those circumstances, the family is self-supporting; it is a strength and stability to the State as an element of population; but if from exposure to contagion, or other influence of disease, the provider for such a family dies before the children have attained such power of independent existence, then the family is thrown upon its friends or upon the poor-rates for support, and hence we have in our workhouses such numbers of widows and orphans hopelessly supported at the public charge. Contrast with these sources of unproductive expenditure, the cost of any or all of the sanitary provisions which have been or may be proposed, and it will be seen that whether we regard our water supply, our sewage arrangements, or other means for bringing cleanliness and comfort to the dwellings of the poor, not merely do the dictates of philanthropy and of Christian charity direct them to be carried out in an abundant and liberal spirit, but the narrowest instincts of self-preservation, and the practical calculation of ultimate economy teach us the same lesson.

In this city, where the excellence, the numbers, and the importance of our medical charities are so well known, it is not necessary for me to refer to the subject of medical assistance in connection with sanitary reform. Medicines, and even the most sedulous care on the part of the physician, do not suffice to alleviate the mental and bodily sufferings of the fever-stricken father, or console by timely and appropriate assistance the anxious family. For such aid a more tender and sympathising helper must be sought, and whether we look to the wards of our splendid hospitals, or to the crowded lanes and alleys of our town, we find on this sacred mission the nursing Sisters of Mercy and of Charity, defying all that is repulsive to our weaker nature, all that is most dangerous in pestilence and death, to bring to the bed of sickness whatever can tend to physical relief, to the pillow of the departing the words of heavenly peace and hope. That holy ministry of truest charity is fortunately not limited to the members of one country or of one creed. The name of Florence Nightingale, honoured everywhere, and loved by all, typifies the same burning charity which kindling in other breasts a similar ardour, has given origin in London, in Liverpool, and in other cities, to the missions of trained district nurses among the poor, and to the formation of schools for educating nurses for hospitals, and for private requirements. By such means a want will be supplied which every physician and every person conversant with the necessities of the sick, rich as well as poor, has felt to be of great importance. To such enterprises, most useful auxiliaries to the progress of sanitary reform, we can give our entire approval. Let us hope that we shall before long see still farther extensions of such practical beneficence among ourselves, bearing in mind the words of the Apostle, that of the three things which abide amongst us, faith, hope, and charity, the greatest of all is charity.

I feel that I have occupied this assembly to an unseemly length, and perhaps exhausted your patience: but the subject was one which from its scientific interest and its practical importance, carried me further, almost against my will, than I had at first intended. I thank you for the kind patience with which you have heard what I had to say, and I hope that this meeting will prove a good augury of the session which the Society has now commenced.

Original Communications.

THE SURGICAL TREATMENT OF ANCHYLOSED HIP-JOINT.

PART OF A CLINICAL LECTURE DELIVERED AT ST. MARY'S HOSPITAL.

By HAYNES WALTON, Esq., F.R.C.S.,

SURGEON TO THE HOSPITAL, AND TO THE CENTRAL LONDON OPHTHALMIC HOSPITAL.

GENTLEMEN,—The next case on which I lecture is that of anchylosis of the hip-joint. All of you know the patient well, as I have frequently drawn your attention to him. A clinical lecture is of little value to you except you have watched the subject of the discourse.

I must preface my remarks by saying a few words on anchylosis.

By an anchylosed joint, complete bony anchylosis is meant—destruction of the joint, fusion of the bones by new osseous matter, and, therefore, loss of all motion.

There is a variety of this, in which there are arches of bone, or an imperfect ferrule around the joint, while the interior of the joint is destroyed and supplanted by fibro-cellular element that ties the bones together very firmly.

This must be considered less disease than the remains of disease. It is what disease has done. It is a reparative process. It is that which we often desire and endeavour to bring about, in that state of joint affection in which the tissues of articulation are removed by suppuration or ulceration. The failure of it often destroys life, and often obliges the loss of a limb to save life. It is a state, however, that I have nothing to do with at present.

Incomplete anchylosis is that with which we are concerned to-day. It is sometimes called fibro-cellular anchylosis. There is no bony union. There is not immovability of the joint, but more or less of motion.

The stiffness may be caused by inflammatory change in the capsule; certain thickness by fibroid bands in the joint; a partial destruction of the synovial membrane and the fibro-cartilage in the joint, and the establishment of fibro-cellular bands.

I shall not consider the effect of muscular contraction in adding to this anchylosis, as it does not concern what I intend to illustrate.

This, also, is a state of repair, and that which we should often attempt to establish.

Incomplete anchylosis comes within the scope of practical surgery.

In certain fit cases we may do good by interfering. We may break down the adhesions or stretch them enough to fulfil our desired purpose. Treatment then may be undertaken to alter the prejudicial position of a limb without any intention of the restoration of motion.

If an elbow be anchylosed in a straight position, it is right if we can to put it in the more convenient one of being bent. A bent thigh may be advantageously put straight, and a bent knee also straightened.

Or it may be prudent to attempt to remove the anchylosis in whatever position the limb may be, with the view of restoring motion—*i. e.*, the power of the limb.

On the diagnosis of the degree and kind of the anchylosis must this treatment depend. A careful examination of the part is needed, and still more the history of the affection. It is here that real practical anatomical knowledge is needed; you must have a thorough knowledge of the joint at your fingers' ends, for without that you cannot detect the alteration in the many parts, in observing which must your diagnosis depend. Theory or mere book education is useless. If you are not fortified in this way, you had better send the patient elsewhere.

In the case which is the subject of this lecture, I

operated to effect both objects—to straighten the thigh and to restore the use of the limb. The first may be undertaken in any degree of muscular degeneration. The latter only when the muscles are in their integrity, or nearly so, therefore only in recent anchylosis. It is a nice question to decide when this is admissible, and only a practical acquaintance with such cases can guide you. Some years ago a gentleman had his right knee and right hip-joint anchylosed; his leg and thigh muscles were shrunken. He managed to hobble about with a crutch, and could get up and down stairs. A surgeon who was consulted broke down the anchylosis of both joints, and the patient was placed in a worse plight than before. He had not the least power over the limb. He could not move any part of it an inch. It became necessary for him to wear a complicated apparatus to stiffen the two joints, but with it he never could get about as well as before the operations.

In contrast to this I will mention a case which occurred to me in private practice, in which I did obtain perfection. A gentleman, while playing at cricket, received a blow on his knee from the ball. Inflammation of the joint followed, and the knee became slightly bent and stiff, without, however, any muscular contraction. I could not detect externally any abnormal condition of the joint, and therefore I concluded that the cause of the imperfect anchylosis was slight, and that as the muscles of the limb had not undergone any wasting, I hoped to break down the anchylosis and restore perfect motion to the joint. The operation was performed under chloroform, and I was assisted by my then colleague, Mr. William Coulson. The adhesions, whatever they were, gave way very readily, and perfect motion of the leg, with perfect use of it, was thoroughly restored. Now, after the lapse of several years, the gentleman cannot tell that there is any difference between the legs.

It is especially in the rheumatic cases to which we should look for opportunities of success, because the inflammation generally attacks the capsule of the joint and produces changes in it without extending into the joint. Occasionally there is osseous material in the cellular tissue around the joint. In what may be called joint disease *per se* without the co-existence of rheumatic fever, the interior of the joint is first invaded with disease, and if anchylosis follow, we may be sure that the new connection is extensive and firm.

You will remember that I examined my patient thoroughly on Wednesday last, and showed you what a beautiful result had been obtained.

He is thirty-two years of age. Some months ago he got rheumatic fever, and was confined to his bed for nine weeks, during the latter portion of which time his left hip-joint became affected with articular rheumatism. I could not get the history of the case in detail. Some weeks after he was about, he was sent to this hospital, and became admitted under the care of Dr. Handfield Jones, who, discovering that there was nothing the matter but a stiff hip, transferred him to a surgical ward under my care.

I found the hip in a bent position; therefore the indication was to straighten it. I expected to accomplish this with ease, because there was every probability of the interior of the joint being healthy, and of the stiffness being due to the parts around the joint, including the capsular ligament, and I was tolerably sure that even here there was no great morbid change. Besides, as the muscular condition of the limb was scarcely altered, I hoped to restore the use of the limb as well. Therefore, I went for the double object, to straighten the limb and to restore motion. To accomplish this, it was necessary, in breaking down the anchylosis, to give the joint a full range of motion, to extend it, and to flex it to its utmost. If my object had been merely to straighten it, I should have done that and not have flexed it at all. Chloroform was administered, and I commenced my operation. I have no doubt that you were much astonished at the ready manner in which I effected my object, and the very audible sound which you heard when the limb gave way under my pressure told you that something had been ruptured. Before the patient left the table you saw me move the limb through as wide a range of movements as the other was capable of being put through. No local disturbance followed the operation. I do not think anybody has been more surprised at the result than the patient himself. In ten days he was getting about with his crutch. The limb was flexed and extended every day a little by the house-surgeon. The patient can now stand alone without his crutch and make a few steps. I doubt not that in a month or two he will be able to go about his usual occupation with full satisfaction. It was my wish that he should remain a few weeks longer at the hospital, but his desire was to go home, and he left yesterday. He has promised to come and show himself from time to time, and I will take care when he does come that you shall see him.

It is astonishing how little constitutional effect follows this breaking-down treatment, and this is, doubtless, because the wound or tear that is made is excluded from the contact of air. Although in common with every operation in surgery it is not devoid of some risk, I can say, after a long familiarity with such practice, I have never seen any ill consequences.

You should clearly determine whether, in any given instance, this treatment is admissible or not, and well understand what it is you intend to do. It is of equal importance that the true nature of what is undertaken be fully explained to the patient, and that he be made to understand that it can be but very rarely that what may be called a perfect result can be got, because there is seldom those conditions that will admit of it. He may be disappointed except this be done. Do not deceive yourself and him by expecting more than can be attained. Nearly always you are operating on a part that has been spoiled by disease.

SUCCESSFUL CASE OF EXCISION OF THE KNEE-JOINT.

By S. K. CRAWFORD, M.D., L.R.C.S.Ed.

E. S. McM., æt. 18, gives the following statement of her case:—About three years ago, while living as a servant, she was ordered by her master to carry a burthen into the garden, leading to which were a number of stone steps; going up these she slipped and hurt her knee; she went through her ordinary work for some time, complaining slightly of pain, to which she paid no attention until it became so severe she was compelled to leave her situation and return home. Having kept quiet for some time the knee improved a little, the pain having in a great measure subsided. She then went to work in a mill, to and from which she had to walk two miles night and morning; here she remained for about six months, when she was again compelled to remain at home. At this time she consulted with and received medicine from another medical gentleman, and occasionally came to my dispensary without receiving any benefit, as by the constant use of the limb she kept up the irritation until ulceration of the cartilages had set in. A short time before the date of operation she had gone to hospital, thinking to be benefited, but she was told nothing could be done for her except amputation, to which she objected and returned home. After her return her mother consulted me concerning spasmodic pains in her bowels from which she suffered. I asked her how her daughter's knee was, when she informed me about her having gone to hospital, and being told there, and elsewhere, of the necessity of amputation; I told her of the possibility of saving the limb, and she called next day to ask me to visit her. I accordingly did so, and having

made a minute examination of her case I proposed to excise the joint, to which, after having consulted with her friends, she agreed.

On the second day after I, with my own assistant, performed the operation, having first secured the services of a steady labouring man to render assistance should the patient become restless. Mr. MacCormac, my assistant, having administered and attended to the chloroform, I made the necessary incisions and removed the diseased surfaces of the femur and tibia, and also part of the under surface of the patella. I then stopped the hæmorrhage from the vessels by torsion, stitched the flaps, and dressed with lint and oiled silk, which done I placed the limb in the straight position in a box made for the purpose with a movable foot-board.

About five hours after I again saw her, and found her recovered to a remarkable degree from the effects of the chloroform and immediate shock of the operation. I ordered her a chlorodyne draught and left her. In the morning she informed me she had slept well during the night, and felt little pain. I continued to administer the chlorodyne at night, and when the fever had subsided I ordered her wine and beef-tea. She complained of the wine not agreeing with her stomach, and I substituted whisky and water, which seemed to agree better with her. On the third day after the operation I dressed the knee, from which healthy pus was exuding in considerable quantity. On the sixth day I again dressed it and found union by the first intention had taken place, except at the angles of the inner and outer incision, from which pus continued to flow, diminished in quantity, and retaining its healthy appearance. The apertures at the angles then commenced to granulate from the bottom upwards, and in about six weeks these were completely filled up.

At the end of the seventh week the wounds were completely healed; and at the expiration of the twelfth week I considered her so far recovered as to remove the box in which the limb was placed.

She now commenced to move the limb gently by drawing it upwards, and then rotating it from side to side.

She continued to improve, and on the nineteenth week she was able to walk about the house supported by a stick, but suffering from slight stinging pains in the knee, which gradually subsided. On her first attempt at walking the unaffected limb by long disuse felt almost as feeble as the other, and it required a little time to enable her to proceed with confidence, holding by whatever she could grasp.

The limb is shortened by about three-fourths of an inch, which is an advantage in enabling her to bring it forward with greater ease.

This case is one of considerable importance, showing the necessity of making as thorough an examination of the joint as possible, in order to ascertain how far the disease may have proceeded, that we may give the patient the use of a real limb, although with a stiffened joint, in preference to an artificial one.

Hospital Reports.

LONDON HOSPITAL.

ATONY OF THE BLADDER FROM STRICTURE IN THE URETHRA.

(Under the care of Mr. CURLING, F.R.S.)

James Colman, a married man, 36 years of age, of nervous temperament and rather feeble constitution, a farm labourer, was admitted into the hospital Nov. 6, 1866, in consequence of being troubled with a constant dribbling of urine. It appears that he had suffered from stricture in the urethra for some years, and about ten months before he had an attack of retention of urine. He came to the hospital, and was relieved by a catheter, and after being treated for a short time for a stricture, was made an out-patient. Since this attack he has always had difficulty in relieving his bladder, and latterly he has been greatly troubled by his water dribbling from him night and day. Mr. Curling saw him shortly after his admittance, detected a distended bladder by percussion, and, without much difficulty, passed a No. 4 catheter through two strictures into his bladder. A very large quantity of urine was drawn off. Mr. C. put him upon a good diet, and directed his bladder to be emptied by a catheter daily, the size being gradually increased.

16th.—The urine had ceased to dribble away during the day, and he was able to retain it from two to three hours, and to void it to a certain extent. A little water still passed from him involuntarily during the night, and he had to get up four times to get ease. He was ordered to take the citrate of iron with strychnia.

29th.—The dresser is able to pass a No. 9 catheter, and finds that the patient is now capable of nearly emptying his bladder; urine pale, and rather copious; ordered twenty drops of muriated tincture of iron three times a day.

30th.—Discharged cured.

In the course of some clinical remarks on the above case, Mr. Curling said that its nature might easily be overlooked by those unaccustomed to treat diseases of the urinary organs. He then pointed out that the history of the case showed that the bladder had been greatly over-distended in an attack of retention. After the urine has been thus retained the muscular coat of the bladder does not regain its contractile power, consequently the urine accumulates up to a certain amount, when distension of the neck of the bladder allows its escape, and the urine then goes on dribbling away, more or less in proportion to the quantity secreted. The fibres of the bladder are now unequal to the task of expelling its contents, especially through a strictured channel. They have been over-stretched and in this way have lost their tone. Even after drawing off the urine daily and thus preventing distension, it will be found that the expulsive power usually returns but very gradually, and sometimes not at all. In this case under treatment for sixteen days, the patient had regained the power of micturition. He could hold his water for two or three hours, and exercise sufficient expulsive power to void the whole of the urine in the bladder.

Mr. Curling then pointed out that this condition is not, as some might suppose, a paralysis of the bladder, but an atony, a loss of tone and power from over distension. A similar state of things is sometimes met with in the rectum, as pointed out in the lecturer's work on diseases of that part,* in which there is a chapter entitled, "On Atony of the Rectum," where cases are described of loss of tonicity and defective muscular power in the lower bowel, preventing the proper extrusion of its contents.

Mr. Curling then went on to show how the atonic state of the bladder in this case, arising from over-distension, may be contrasted with a not uncommon condition, arising from some impediment to the escape of the urine. For example: a thickening of the bladder, chiefly owing to hypertrophy of its muscular coat; in their frequent efforts to overcome the obstruction, the muscular fibres acquire an abnormal development—the exact opposite to the state of the bladder seen in cases of atony. The treatment adopted in the case reported above was complete emptying of the bladder with the catheter once a day. This process prevents too great accumulation of urine, enables the muscular fibres of the bladder to contract, and at the same time distends the strictured part of the urethra. To give strength and tone to his system he ordered the citrate of iron and strychnia. At a later period he sub-

* Diseases of the Rectum, by T. B. Curling, F.R.S., Surgeon to the London Hospital.

stituted the muriated tincture of iron to improve the quality of the secretion.

The result was quite satisfactory, and the recovery of expulsive power more rapid and more complete than usual.

RICHMOND, WHITWORTH, AND HARDWICKE HOSPITALS.

Dr. LYONS'S CLINIQUE.

Capricious Sporadic Oculo-Facial Paralysis.—Under this term Dr. Lyons proposes to describe a form of paralysis of very unusual occurrence, and presenting very remarkable features. It was well exemplified in the following case :—

K. O'M., unmarried, aged about 25, was admitted into hospital under Dr. Lyons's care. She stated her occupation to be that of a milliner, and asserts that, with but very slight premonitory symptoms, such as slight localised pain in left temple, it was observed to her by one of her companions in the work-room that she was beginning to squint. She soon found this to become a confirmed condition, and that, moreover, there was double vision. She felt much alarm, and when admitted was exceedingly apprehensive as to the results of this strange affection. On very careful examination it was found that double vision, with paralysis of sensation of a large surface of the eye-ball, loss of sensation of smell at the left side, and total insensibility of numerous parts of the side of the nose and face externally, as well as of the mucous surface internally, were present. The paralytic phenomena were all strictly confined to the left side. On further exploration it was ascertained that the double vision was wholly due to paralysis of the external rectus of the left side. In causing the patient to roll the eyes right and left, it was found that the left external rectus could bring its globe to about the position of "eyes front," but no effort could drag it beyond that. While, then, the axes of vision could be consentaneously moved by the right external rectus and left internal rectus, vision was single and perfect, and in all movements of both eyes to the left, the left eye stopped at "eyes front," while the right was drawn in towards the nose and all objects were consequently seen double. Pricked with a needle smartly the globe of the left eye was everywhere insensible. The lids were insensible externally and but partially so internally. The nasal twinge of the ophthalmic was insensible where it becomes superficial, and the left side of the nose internally as well as part of the left side of upper lip externally was insensible, and parts of the palate of same side failed to recognize the needle point. In some situations the lip externally was insensible, and at a precisely corresponding part internally sensation was present.

Having fully exhausted the phenomena of the case in repeated explorations, Dr. Lyons, from a previous experience of this form of paralysis, was enabled to give a reassuring diagnosis, and remove the painful and depressing apprehensions of threatened mischief to the brain previously entertained. The eye was found healthy by the ophthalmoscope. A confident opinion was likewise expressed that the squint would be cured. A careful but generous regimen was prescribed, a blister was applied to the external wall of the orbit, and bromide of potassium was administered. Electric shocks were likewise employed for a considerable period, and eventually the continuous galvanic current was applied to various parts of the face, and as efficiently as could be done, by means of a needle point to the external rectus.

After a long period, part of which only was spent in hospital, complete convalescence was established in this case.

In a second case, the particulars of which will be given more at length in another report, Dr. Lyons has met with this form of paralysis, and under circumstances in which still greater complication and difficulty of diagnosis existed.

The patient was aged 60, a man of sedentary and very studious habits. Double vision with ptosis suddenly occurred, and as there was partial loss of taste, the most unfavourable augury was held with regard to the issue of the case, softening of the brain being apprehended.

After most careful exploration of all the phenomena, Dr. Lyons gave a favourable prognosis, which was fully justified by the ultimate complete restoration to health of the patient, with perfectly single vision.

CHRISTMAS AT THE ROYAL INSTITUTION.

On Thursday last we had the pleasure of hearing Prof. Frankland open his course of six lectures on the chemistry of gases, adapted to a juvenile auditory. The theatre was crowded with an attentive audience, and the experiments were very successful. Not a few of the listeners, however, could lay but little claim to the term juvenile; for, though a very large preponderance of the young was observable, yet many full-grown and even elderly people had been attracted to this rational Christmas entertainment.

The following syllabus will give the reader the scope of Professor Franklands' lectures :—

Subjects of the Course.

Distinction between Solids, Liquids, and Gases.
How to collect Gases.
Transference of Gases from one vessel to another.

Hydrogen.—Its extraction from Water and from Acids —Its combustibility—How it burns, and what it produces when burnt—Colourless Gases rendered visible.

Oxygen.—Presence of this Gas in Air and Water—How to obtain Oxygen from the Air by Quicksilver, and from Water by Chlorine and by Electric Decomposition—Preparation of Oxygen from Potassic Chlorate (*Chlorate of Potash*)—Chemical combination of Oxygen and Hydrogen—Relations of Oxygen to Combustion.

Nitrogen.—Extraction of this Gas from the Air—Composition and Properties of Air—Spontaneous mixture of light and heavy Gases.

Carbonic Anhydride (*Carbonic Acid*).—How to gte this Gas out of Marble and Limestone—Its relations to Combustion—Permanent and transitory Gases—Liquefaction of transitory Gases—Liquefaction and Solidification of Carbonic Anhydride—Great Cold produced by the Gasification of a liquefied or solidified Gas.

Carbonic Oxide.—Its preparation from Charcoal and Carbonic Anhydride—How it burns in Air and what it produces when burnt.

Marsh Gas.—Its occurrence in Coal Mines—How to get this Gas from Ponds and Marshes, and from Hay, and other Vegetable Substances—The Combustibility of Marsh Gas and its Explosiveness when mixed with Air or Oxygen.

Olefiant Gas.—Its extraction from Alcohol—Combustibility and Luminosity of this Gas.

Nitrous Oxide, or Laughing Gas.—How to prepare and collect this Gas from Ammonic Nitrate (*Nitrate of Ammonia*)—Curious effects of Nitrous Oxide upon Animals.

Hydrochloric Acid.—Preparation of this Gas from Common Salt and Sulphuric Acid—Its Collection over Mercury—Its solubility in Water.

Chlorine.—Extraction of this Gas from Hydrochloric Acid—Chemical energy of Chlorine at Common Temperatures, and under the influence of Light—Combination of Chlorine and Hydrogen—Bleaching powers of Chlorine.

Ammonia.—Preparation of Ammonia from Sal Ammoniac, and Regeneration of the latter from Ammonia and Hydrochloric Acid—Acidity of Hydrochloric Acid—Alkalinity of Ammonia—Neutrality of Sal Ammoniac.

Phosphoretted Hydrogen.—Action of Water upon Calcic Phosphide (*Phosphuret of Calcium*)—Spontaneous Inflammability of Phosphoretted Hydrogen—Comparative Inflammability of different Gases—The Philosophy of Combustion

Effects of Heat upon Gases—Remarkable properties of hot Gases—The Light emitted and absorbed by hot Gases. Spectrum Analysis—How hot Gases are detected in the Sun and Stars.

Reviews.

LECTURE NOTES FOR CHEMICAL STUDENTS, EMBRACING MINERAL AND ORGANIC CHEMISTRY. By Edward Frankland, F.R.S., &c. London: John Van Voorst, Paternoster-Row.

The last two years have been prolific, as regards the production of English works connected with Chemical Science. Amongst others we have two of the first professors in London constructing elementary works for the use of students, and both of them have adopted, *in toto*, the notation and equivalent numbers used by modern theorists. The new system, which is to be partially adopted in the pharmacopœia, has certainly received a rapid expansion within the last few years from the labours of the English chemists, both by their practice and writings. If we except the labours of Berzelious, we may claim the birth of these views as having emanated from our own country many years ago, but there is no doubt that their primitive development occurred in France. It is in England, however, that these changes have been really taken up and placed upon a substantial basis, by the publication of works of reference, manuals of instruction, and essays upon original research, in which the various authors have completely ignored the old views.

When such a man as Edward Frankland gives a book to the world it will be sure to obtain a greater share of attention than a more pretentious one would from other hands. A sound philosopher, and a successful experimenter in his own particular science, he makes us feel that he hands us down a name worthy to consort with those who have gone before him.

"Notes for Chemical Students" is no more than what is expressed by the title. All minute description or details of experiments are excluded. It is an outline of the science drawn on the broadest plan, but with the most careful regard to definitions—it is, in fact, a book of reaction formulæ illustrating the principles of the science. The author also uses extensively a system of graphically portraying the chemical changes by circles (something in the same method as that used by Dalton) and bonds. The circles represent atoms, whilst the bonds represent the mode of attachment. "My aim," says the author, "has been to classify and systematise rather than to describe, and I have endeavoured to furnish the student with a kind of skeleton of the science, which it is intended he should himself clothe with the already known and daily increasing facts of experimental research."

Of the practical use of this book to students for the next five or six years we have some doubts, except for the author's immediate class, and a few more teachers who are prepared to adopt at once all the extreme views of Cannizzaro and some others. The book is written in a masterly style—*i.e.*, by one who has evidently his profession at his fingers' ends—yet in a terse and even elegant language. Thus how seldom do you find a correct definition of the science itself given? In that deservedly veteran favourite, *Fownes' Manual*, the author opened with a description of the science of chemistry, which would include every known branch of the physical sciences. The definition of chemistry is, according to Frankland, "the science which treats of the atomic composition of bodies and of those changes in matter which result from an alteration in the relative position of atoms;" and in the same pithy and clear manner the elements of the science are unfolded.

The author makes a determined stand against unsystematic nomenclature (Chap. 2); and whilst heartily concurring with his views in this respect, we see innumerable difficulties in the way. There are many of the trivial or irregular names so associated with uses in the arts that the substitution of others will not be generally adopted—*e.g.*, "hydric oxide" will never replace "water." Another cause of the feeling that militates against the systematic names proposed is their want of euphony—thus hydric-carbide, for marsh gas, is not very elegant, and hexapotassic-diferic-dodecacyanide (ferricyanide of potassium) is certainly stilty.

The author, with the assistance of Mr. H. McLeod, has been at some considerable trouble in drawing out the most important family of minerals under their systematic name, in connection with their graphic formulæ. In this case the graphic formulæ is most invaluable; but the systematic nomenclature cannot practically be used here, as the chemical composition in mineralogy is subservient to the physical characteristics.

The physical part is disposed of in a few pages, by giving the measures of weight, capacity, heat, and a description of the crith, or standard multiple (0.0896 gramme), proposed by Dr. Hofmann, for the conversion of gaseous volume into weight. The atomicities of the elements (so called) are explained by the bonds in graphic formulæ, or by dashes, &c. In the glyptic formulæ the use of the latter is particularly seen, when we get into the second division, or organic chemistry, in which the number of elements employed in the construction of the numerous compounds is so small, yet the number of their molecules is so great.

We would wish to go further into this important subject, but that space forbids. Although written for the student, it is in our opinion a work that will not be used by the tyro, not from any want of perspicuity, but from the fact that it is in advance of the chemistry at present taught in most of the schools; but it is a book that should be in the hands of every proficient of the science, whatever views he may hold himself. We are of opinion that this work will deservedly add to the fame of the author. C. R. C. T.

CHEMISTRY FOR STUDENTS. By A. W. Williamson, F.R.S., F.C.S., Oxford. Clarendon Press.

Dr. Williamson's book, as a whole, is a very dissimilar one to the above, yet it has some points of resemblance, viz.: It is a book intended for the student, framed upon the latest theories as regards the equivalents. Dr. Williamson's splendid researches, published many years since in connection with the molecular construction of the ethers, did much towards the establishment of the new views, and a manual from his pen should constitute a fitting introduction to the science to those who wish to adopt them.

We, however, would prefer that the work had been constructed upon a more logical method by first enunciating the broad principles of the science. The author adopts an entirely different plan. He opens with a description of the most important element—oxygen, then hydrogen. This naturally leads to water, and at this point the work is interlarded with three or four chapters on Physics—*i.e.*, latent heat of expansion, specific heat of water, &c. Then comes Chemical Notation (Chap. 5), and at the 13th Chapter, the Atomic Theory.

But the author had been previously describing decompositions, and opens his book with "Oxygen (O^2,O = 16)." What is the student supposed to know of "(O^2,O = 16)," or "H^2O" before he learns the atomic theory? The author's reason for doing this is, perhaps, best explained in his own words, but we do not admire it. He says:—

"The method of exposition differs from that which is adopted in most other treatises of chemistry, for I describe and compare individual facts, so as to lead the mind of the reader towards general principles, instead of stating the general principles first and then proceeding to illustrate them by details."

Again, we think that too little importance is attached to the points connected with decomposition and construction, analyses and synthesis. The descriptions of them, the elements of the science being meagre, whilst the space devoted to the physical description is much greater than what is wanted in so small a manual. The author uses a table of elements, the equivalents of which are similar to those used by Cannizzaro, &c. He has a primary division into elements of uneven and even atomicity, and subdivisions into monads, dyads, triads, tetrads, &c. C. R. C. T.

CLINICAL MEMOIRS ON THE DISEASES OF WOMEN. By Gustave Bernutz, Physician to La Pitié; and Ernest Goupil, late Physician to the Bureau Central. Vol. I. Translated and edited by Alfred Meadows, M.D., &c. 8vo. Published for the New Sydenham Society. 1866.

This volume is a translation, and in part a condensation, of the first part of the "Clinique Médicale sur les Maladies des Femmes," published by Messrs. Bernutz and Goupil, in 1860. The number of pages in the translation is less by half than the number in the original work; and we have the authority of the editor for saying that, while the translation has been abridged, in compliance with the instructions of the Council of the Sydenham Society, "the process of con-

densation has been principally restricted to the cases and notes;" the text has been given as fully as the space at Dr. Meadows' disposal would admit of. The general arrangement as to chapters and sections has been modified, with the view of making the work somewhat English in character; and the foreign weights and measures mentioned in the original have been reduced to our English standards.

As to the original work of Messrs. Bernutz and Goupil, it may be remarked that it is not a dogmatic treatise on the diseases of women, but merely a collection of clinical memoirs, as its title indicates. We have nothing to do with the character of the book itself; and we may observe that while the translation has been faithfully done, the notes bear the impress of want of accuracy, respecting which the reader need not go farther than the first page to see that ordinary care in revising the proofs would have prevented the defects here mentioned. This must not, however, be held in any wise to detract from the merit of the book itself, or from the fidelity of the translation.

LETTS'S DIARIES FOR 1867.

The circulation of these annuals nearly reaches 300,000, and we understand that it steadily increases in each successive year. The diaries are adapted to all classes of the public—some being peculiarly suitable for medical men—and they contain a great amount of miscellaneous information besides the usual almanac. The estimation in which they are held has been proved not only by their extensive sale, but by the fact that three prize medals have been awarded to them—one respectively in London, Dublin, and Oporto.

THE PRINCIPAL BATHS OF FRANCE; considered with reference to their Remedial Efficacy in Chronic Disease. By Edwin Lee, M.D. Fourth Edition. Re-written, with Additions. Pp. 154. London: Churchill and Sons. 1866.

HOMŒOPATHY AND HYDROPATHY impartially appreciated, with Notes Illustrative of the Influence of the Mind on the Body. By Edwin Lee, M.D. Fourth Edition. Re-issued. With Supplementary Remarks on Homœopathy. Pp. 158. London: Churchill and Sons. 1866.

ANIMAL MAGNETISM AND MAGNETIC LUCID SOMNAMBULISM. By Edwin Lee. Pp. 334. London: Longmans. 1866.

The number and variety of Dr. Lee's books testify alike to the versatility of his knowledge and the activity of his pen. The three volumes before us are on the most different subjects, and yet they all display a great amount of industry in their composition and of ability with which the topics are handled. The little work on "The Baths of France" is probably already well known as a useful guide to the celebrated watering-places of that country, and the present edition contains such additional information as the author has gained from personal visits to the spots described.

The book on Homœopathy and Hydropathy, which has also gone through several previous editions, contains a very able criticism and denunciation of the first form of quackery, and a just appreciation of the merits of the system of Priessnitz, which, within proper limits, is useful enough as an adjunct to other medical treatment. In his book on Animal Magnetism, Dr. Lee avows himself a believer in the phenomena which have been included under that term, and those who are curious on the subject will find it treated at length in his pages.

REFLECTIONS ON CHOLERA. By Alexander Hamilton Howe, M.D. London: Hardwicke. 1866.

CHOLERA: ITS CAUSE AND CURE. By Joseph Wallace, M.D. Belfast: Magill. 1866.

The first of these pamphlets is an epidemiological tractate written by a member of the Epidemiological Society, and addressed to the public. It is one of the many attempts made to stay the plague by advocating sanitary and hygienic prevention. Dr. Wallace advocates a sort of homœopathic treatment. His "specific remedy" is *Coffea Cruda*, a tincture of raw Mocha coffee, respecting which he gives directions for preparation and use in small doses of from three to ten drops.

Dr. Wallace concludes thus:—"Let those, therefore, *who desire to be known as true physicians, give my specific a fair trial*, and they will reap more benefit than they can hope to gain by *holding private meetings* to organise a plan to prevent the public from deriving that benefit from my discoveries which they are calculated to give."

The italics are Dr. Wallace's own; and the specimen of his pamphlet is, we are happy to say, peculiarly his own also. To our readers we merely say, "*ex uno disce omnia.*"

CURRENT LITERATURE.

Under this title we propose, from time to time, to notice not only periodicals and pamphlets of passing interest, but a number of publications which we cannot find space to criticise at length. Here, also, we shall have the opportunity of mentioning, at an early date after their appearance, certain other important works to which we shall afterwards accord a more extended review. By this means we may further, perhaps, dispense with the usual notices of books received.

To begin then: Amongst the periodicals we may, at the commencement of the new year, congratulate some of our contemporaries on the manner their last volumes have been conducted. Of these we have the *American Journal of Medical Sciences*, and the *New York Medical Journal*, both of which have maintained the reputation of American scholarship. It is almost invidious to select papers, but we name, as especially interesting in the former, Dr. Hart's paper on Inhalations of Atomized Fluids; and in the latter, Professor Flint's, on the use of the Thermometer in Diagnosis and Prognosis. These are merely mentioned on account of the recent investigation of the subject, showing that Brother Jonathan is quite abreast with us—a fact to be gleaned from many other American journals, which we would gladly particularise, including the Cincinnati, Chicago, Buffalo, Richmond, Savannah, and some others which have reached us at intervals, and which we shall be glad to receive regularly.

In our own Colonies we are glad to find the *Canada Medical Journal*, the *Madras Quarterly*, and some others still flourish. To these we shall recur shortly.

As to our home journals, English, Irish, and Scotch, we have so often given each a separate notice that we may fairly omit them on this occasion. The impossibility of summing up our own periodical medical literature readily explains why we do not enumerate the many foreign journals we have received. In return for each we have forwarded our own in exchange, and take this opportunity of announcing our willingness thus to reciprocate with all our contemporaries at home and abroad.

We now turn to other publications. There has been for some time lying upon our table "*Sanitary Measures and their Results*," by Thomas Shapter, M.D., F.R.C.P., containing so excellent an epitome of what has been done, and with what effect, in Exeter, that we have only been waiting from week to week for space to furnish a full abstract. We must, however, delay no longer to commend Dr. Shapter's concise statements of facts to the earnest attention of all interested in the subject. On an allied topic we have also for some time had Mr. Sanderson's useful "*Suggestions respecting the Present Cholera Epidemic.*" Mr. Sanderson is a well known engineer, and eloquently urges his views respecting the drainage and water supply of the metropolis, and the reclamation of East London from dirt and disease to a sanitary state, worthy of our civilization.

The Medical Press and Circular.

"SALUS POPULI SUPREMA LEX."

WEDNESDAY, JANUARY 2, 1867.

CLITORIDECTOMY.

It is not without a feeling of the greatest reluctance that we allude to the discussion now going on in profession circles on the subject of Clitoridectomy, an operation which is proclaimed by some as constituting a new era in the treatment of some diseases of females, and is condemned by many others as being not only useless but mischievous. For some months the efficacy of Clitoridectomy in some very serious diseases—as epilepsy, hysteria, and even insanity—has been loudly extolled, and even the columns of the "Times" have given currency to the favourable reports which have been made as to its success. But it must be admitted that these outbursts of commendation have been, to say the least, premature; for, independently of objections that may be made on other grounds, the new operation has not yet been adequately tested, in order to enable Practitioners of Medicine and Surgery to determine its real merits, and until this has been done it is somewhat injudicious to introduce the subject to the general public. In the meantime a host of objections, physiological, pathological, practical, and moral, have been offered to the proceeding by many who are capable of judging, and we must confess that many of these objections appear to us to have very great weight. In the first place, it is not at all clear that such diseases as epilepsy, hysteria, and insanity are in any way caused by functional or organic disease of the clitoris, and it is equally doubtful whether certain practices which are said to cause the diseases referred to are not rather the consequences than the cause. Again, we doubt whether the practices in question are really prevalent among the females of the present age, even if they were ever prevalent at all, at least to such an extent as seems to be assumed by the advocates of Clitoridectomy. Nor is it clear that even if the organ be removed, will the vicious tendency be eradicated. In opposition, too, to the statements made by Mr. Baker Brown, who is the great advocate of Clitoridectomy, as to its success, there are many counter-statements, alleging that it has entirely failed in the treatment of the diseases for which it is said to be specially adapted. In the controversy which has sprung up, much personal feeling has been displayed, and charges and countercharges of mendacity have been somewhat unsparingly brought by both sides; but however disagreeable the subject may be, we hope that it will not be allowed to drop until the Profession have been enabled to pronounce an authoritative opinion upon the points now submitted for its judgment. For the reasons we have above rather hinted at than fully explained, our own opinions are rather adverse to the operation, unless, perhaps, in some special cases, and after full consultation.

THE NEW PHASE OF HOMŒOPATHY.

From certain indications of what is floating about on the surface of homœopathic literature, it would appear that the votaries of Hahnemann are beginning to distrust their idol, and to suspect that, after all, he made a great number of egregious mistakes. Not only is it doubted whether there is any force in his later assertions, that the smelling, or "olfaction" of such inert substances as chalk or flint, has an appreciable influence on the bodily organs, but he himself is admitted, by some of his own followers, to have been an arbitrary dogmatist and a scientific despot, with a dash of fanaticism, and a great deal of sectarianism and censoriousness. Now, this is pretty nearly the character given of him by those who disbelieve his dogmas, and if the believers in homœopathy attribute to him the same mental peculiarities, it is very probable that, as both parties are agreed, they are, in this respect, in the right. The fact is, everybody admits that he was a laborious investigator and a persistent defender of what he believed to be important truths; but then these supposed truths, when submitted to the test of experience, have turned out to be little more than unsubstantial visions, possessing, however, just so much substratum of facts as to redeem them from utter absurdity. Even the faith of the homœopathists in the infinitesimal globules begins to be shaken, and we are gravely told by one of their writers that there may be "cases in which pain must be relieved by opium; poisons must be removed by emetics; and perhaps, in wounds of the intestines, the parts must be kept at rest by large doses of opium." Why, if the homœopathists admit all this, they admit almost everything, for *if* pain is to be relieved by opium, and *if*, as many of the sect allow, castor-oil is to be administered in constipation, and *if*, as we have seen reported in their own journals, cod-liver oil and iodine are employed in scrofula (and these, be it observed, not in infinitesimal but in the usual doses), then the whole question at issue between what they call, in their absurd jargon, homœopathy and allopathy, collapses into nothingness. Many diseases, as is well known, will terminate, if left to themselves, in a spontaneous cure, and others will remain incurable, or will terminate in death, in spite of all treatment, and the homœopathists deserve no credit for the cure of the former cases, and no blame for the results of the

latter. Where they are blameable, and most justly so, is for their arrogance and presumption in pretending that the administration of inert infinitesimal globules has any influence whatever in arresting the progress of disease, or in correcting the effects of a more rational, though it may be, unsuccessful practice.

But, as we have observed, a new phase is developing itself in the position of the homœopathic doctrines. We are now told authoritatively that "homœopathy does not consist in giving medicines in infinitesimal doses, and so testify all who practise homœopathically," and then we are gravely referred to the etymology of the word, invented by HAHNEMANN for the name of his system, as if nobody understood Greek except a few of the homœopathists themselves. No elaborate argument is required to prove that the doctrine of *similia similibus curantur* (the rather barbarous Latin of "like cures like") is to a certain extent, and in a limited number of instances, founded on facts; but then the objection is fairly made that most of the instances brought forward as facts by HAHNEMANN are not facts at all, being founded on such a scanty number of experiments as to divest them of all scientific value or significance. It is true, for instance, that vaccinia, which bears a certain resemblance to small-pox, will, by inoculation in the system, prevent in most instances the latter disease; but it is *not* true that belladonna will cause scarlet fever, and it is not proved that it will either prevent or cure it. Again, it is true that the application of a blister which causes an external inflammation will often help to cure an internal one; but it is *not* true that quinine, although it will cure an ague, will ever cause one. It is mere idle sophistry to compare the headache, and the other slight feverish symptoms sometimes caused by an overdose or an improperly administered dose of quinine, with the regularly recurring paroxysms of an intermittent. Once more, if there were any truth in the universality of the law of *similia similibus*, the cure of an ague should be effected by placing or leaving the patient in the marshy district which produced the disease, whereas all common sense and common experience, and we may add common humanity, point to a precisely contrary plan.

If, then, the homœopathists give up the infinitesimal globules, and rely upon the doctrine of *similia similibus*, and if, moreover, they abandon their arrogant assumption of having made a wonderful discovery in medicine, there is some hope that they may secure a hearing for the few maxims of common sense which, amidst an infinitude of fallacy and verbosity, pervade their doctrines, but which, we may observe, were well known and adopted before the time of HAHNEMANN. At the same time it would be unfair to deny that the practice of the homœopathist has read us the useful lesson that the *vis medicatrix naturæ* is of powerful efficacy in the treatment of diseases, and that the excessive or injudicious use of drugs is on all grounds to be deprecated.

THE REMUNERATION OF IRISH POOR-LAW OFFICERS FOR CHOLERA ATTENDANCE.

THE recent cholera epidemic has evoked from the Dispensary Medical Officers of Dublin an amount of self-sacrifice and labour in the discharge of their duties which deserves the attention and gratitude of the public. The late onset of the disease, though numerically of less importance than past epidemics, has been most virulent and fatal, and has, under Divine Providence, been undoubtedly stemmed in its progress by the Medical Officers of the city, and the efforts of Dr. MAPOTHER and the sanitary authorities. In almost every district the Medical Officers not only devoted unremitting attention at all times of the day to the unfortunates stricken down, but they left their home and families and in rotation remained all night in the Dispensaries watching for the call to hurry forth and battle with the fell contagion. We repeat the statement that the Dispensary Officers of Dublin have earned the gratitude of the public by a complete sacrifice of their comforts to a strong sense of duty, and by fearless exposure to danger, which none can appreciate better than they themselves. Nor have they escaped the natural consequences of exposure to cold, miasmata, and infection, for many of them have passed through severe attacks of choleraic diarrhœa, miasmatic fevers, and anthraxs, and have dearly paid in their health for the immunity of the poor from disease.

The Medical Officers of Dublin have not bargained and sold their services in this crisis—they have met the demands of humanity without stinting it by their expectation of remuneration, and it is placed on the honour of the public and on their sense of grateful justice to show their appreciation of such services on a scale as liberal as the excessive duties have been. In most of the suburban districts, where the claims of duty, though sufficiently exacting, were much less so than in town, the Guardians have fairly and honourably met the occasion by a vote of one guinea per day to each medical man, and not even the most parsimonious of ratepayers will think that the *honorarium* was easily or inadequately earned. We regret to learn that in Dublin the fee named has been only ten-and-sixpence. We offer no reproach for the shabbiness of this remuneration, which we regard as a matter of secondary importance; but we simply ask the Guardians, which of them would discharge even a tithe of the duty for the sum proposed, and whether they consider that such an unjust parsimony will be an encouragement to

medical men to meet such labours, inconveniences, and dangers, on another occasion? It is but just to say that the Dublin Boards of Guardians have energetically and liberally battled with and crushed the epidemic, and it would be unworthy of them to act in a spirit of illiberality and unfairness to their officers, who have so disinterestedly carried out their instructions.

THE HEALTH OF LONDON.

According to the last return of the Registrar-General, the health of London continues to be good. During the 51st week of the year, which ended on the 22nd of December, the total mortality was 1377, which is 75 less than the estimated number for the corresponding week.

Two deaths from cholera and 16 from diarrhœa were registered during the week.

Twenty-six deaths from small-pox, 30 from scarlatina, 43 from whooping-cough, and 55 from fever were registered in the week.

Phthisis proved fatal to 178 persons; 171 deaths occurred from bronchitis, and 98 from pneumonia.

Five deaths were registered as resulting from injuries caused by horses or carriages in the streets, and 7 children died from burns or scalds.

The annual rate of mortality last week was 23 per 1000 in London, 29 in Edinburgh, and 24 in Dublin; 22 in Bristol, 21 in Birmingham, 33 in Liverpool, 32 in Manchester, 31 in Salford, 23 in Sheffield, 28 in Leeds, 20 in Hull, 34 in Newcastle-upon-Tyne, and 29 in Glasgow.

At the Royal Observatory, Greenwich, the mean height of the barometer in the week was 30·111in. The mean temperature of the air in the week was 41·3 deg., which is 2·0 deg. above the average of the same week in 50 years (as determined by Mr. Glaisher). The mean of the highest temperature of the water of the Thames was 42·4 deg.; that of the lowest was 41·1 deg. The difference between the mean dew-point temperature and the air temperature was 3·2 deg. The mean degree of humidity of the air was 89, complete saturation being represented by 100. Rain fell to the amount of 0·05in. The general direction of the wind was south-west. According to a return furnished by the engineer of the Metropolitan Board of works, the average daily quantity of sewage pumped into the river Thames at the southern outfall works, Crossness, was 207,543 cubic metres.*

Notes on Current Topics.

The Royal Colleges of Physicians and Surgeons, London.—We hope we are not premature in announcing a step in the right direction. The English College of Surgeons has made a communication to the sister College respecting the propriety of introducing some examination in medicine for the candidates for its diploma. The reply has been prompt and courteous, and the College of Physicians has appointed a committee to report on the subject. There ought to be no difficulty whatever about the matter. In this year of grace 1867 surely a termination can be put to the rivalries of our corporations. Otherwise it were well for the profession to remove them from the elevated position they have so long occupied, and hand over their privileges to institutions more in harmony with the times.

The Dangers of Christmas Beef.—A few years ago the lovers of good cheer were alarmed by statements to the effect that most of our prize oxen were the subjects of fatty degeneration, and that the bulk so much admired was in reality disease. More recently this has been denied, but all investigators are not satisfied. Pending the controversy, we beg to point out a far more easily demonstrable danger. In every street in London the butchers have recently displayed their Christmas beef gaily decorated with ribbons and rosettes. Now these ornaments are mostly fastened with pins, which if overlooked may give rise to sad accidents. Cooks are sometimes guilty of putting pins in meat, and there is another instance of thoughtlessness on the part of those through whose hands our food passes. The idea of one's meat being diseased is enough to destroy the appetite, but will make a less serious impression on many a mother than the danger of seeing her child left choked by a pin in its throat.

The "Pall-Mall Gazette."—Some of our readers will, no doubt, sympathize with the proposal of an esteemed correspondent in our last number to raise a fund with which to express the gratitude of the profession for the spirited manner in which the *Pall-Mall Gazette* has defended our rights, and notably in the recent trial of Hunter *v.* Sharpe. A similar idea has also been started in another quarter, and there seems now to be little doubt that it will be carried out. For our own part, we firmly believe that the public is even more indebted than the profession to the journal in question. Whatever the merits of any particular case, English journalism will always defend the right to criticise proceedings in which the well-being of society is involved, and we think that the defence of such rights is a matter of public interest. We trust, therefore, that subscriptions will not be confined to our own profession—by no means a rich one. We should be glad, indeed, to see the public sufficiently alive to the subject to raise money enough to put down every species of quackery that subsists on the fears of the suffering and the ignorant. We need only add that we shall be happy to acknowledge contributions in our columns, and in any other way co-operate in the movement.

A Small-Pox Ward.—Four or five cases of *modified* small-pox occurred last month among the in-patients at King's College Hospital. The first patient had been in the hospital a fortnight when he was seized, and although he had been out twice during that time to see his relations, none of them were suffering from the disease, and the infection could not be traced. He was removed to the Small-pox Hospital, but when the two patients occupying beds on each side of him were afterwards seized, a ward was cleared to receive them. No new case has occurred for a fortnight. In none of the cases did the eruption

* A cubic metre is equal in volume to 35·3174 cubic feet, or to 220·0967 imperial gallons. It is nearly equivalent to the old English "tun" of four hogsheads, or to 35·248 cubic feet. It is in general use on the Continent, and is a much better unit for measuring sewage or water supply than the gallon.

last beyond the sixth day; in some only to the fourth. All the patients had been vaccinated—all, in fact, had very distinct marks, and all suffered so slightly from the varioloid eruption, that the cases may be called trivial. Had they not been under medical surveillance for other diseases, the variola would probably have passed unnoticed. We have reason to believe that sometimes such mild cases as these occur, in which no medical advice is sought, and the patient only remembers "a little eruption," or a "few pimples."

THE DIRECTOR-GENERALSHIP OF THE ARMY MEDICAL DEPARTMENT.—The office of Director-General of the Army Medical Department will, it is understood, shortly become vacant, in consequence of the expiration of the term of office of Sir James Gibson. Speculation is already busy with the names of officers likely to succeed him, but all conjectures on the subject must at present be premature, because the present Director-General is eligible for reappointment, and the question with the Government will probably be merely one of finance, for if Sir James Gibson retires, he will be entitled to a retiring pension equal to his present salary, and there is already another former Director-General on the retired list. The position, the emoluments, the influence, and the patronage of the Director-General of the Army Medical Department have been very much altered of late years by the Government, and the occupant of the office has in reality very little power in comparison with some of his predecessors. Sir James MacGregor, who held the appointment for many years, had a salary of £2000 a year, and was absolute chief of the department, holding all the patronage in his hands, and regulating the promotions at his own will; but on his retirement the salary was cut down to £1200 a year, and the patronage was entirely abolished, and this somewhat unwise economy has probably been the cause of many of the shortcomings of the Army Medical Department. Sir Andrew Smith, in adopting the economical principles on which his own appointment was founded, endeavoured to introduce so many schemes of reduction that, as is well known, the whole machinery broke down, and he retired with a pension of £1500 a year, which is the present salary of the Director-General. It is only fair to state that Sir James Gibson, who is certainly rather unpopular with the Army Medical Officers, is not altogether responsible for the grievances so generally complained of, inasmuch as his influence is comparatively very much limited by the authorities at the Horse Guards.

HYGIENE IN THE MERCANTILE MARINE.—While the condition of the Royal Navy in respect to its sanitary regulations has been immensely improved of late years, that of the mercantile marine has been most unwarrantably neglected. The reason of the difference in these two branches of the public service is to be found in the circumstance that while the Royal Navy is governed by a central authority, the acts of which are jealously watched by the House of Commons and the public, the merchant service on the contrary is regulated by individual shipowners, who are to a great extent irresponsible. Hence arises the prevalence of scurvy and other diseases in merchant vessels, while the health of the men in ships of war is unexceptionally good. It will be gratifying to the public to know that the whole subject of improving the hygiene of the merchant service is occupying the close attention of the Government, and that it is proposed to introduce some measures in the next session of Parliament which will remedy many of the existing evils. The censures passed upon the shipowners apply of course only to exceptional cases, for many of those employers of labour conscientiously watch over the health of the crews whom they employ; but as in all other pursuits in life, there are persons who neglect their duties, and these will, by the contemplated legislation, be brought under the pale of the law.

Proceedings of Societies.

AN ADDRESS

DELIVERED BEFORE THE

SURGICAL SOCIETY OF IRELAND,

AT THE OPENING OF ITS THIRTY-SIXTH SESSION,

On December 8th, 1866,

By the President of the College, Dr. BUTCHER.

GENTLEMEN,—as President of the Royal College of Surgeons, I have the honour of addressing you to-night. We meet to inaugurate the Thirty-sixth Anniversary of the Surgical Society of Ireland. After the very able Address of Professor Jacob, at the opening of the Session of 1864, in which he detailed the entire constitution of the Society, from its very foundation in the year 1831, its rules, its bye-laws, the mode of election of its governing body, its council, and all its component parts, it would be superfluous to add one word on that subject. Again, the able and valuable Address of my distinguished predecessor, Dr. Wilmot, in which he eloquently spoke of the protective influence of the College of Surgeons, so freely and encouragingly extended to this Society, for the advancement of Medical and Surgical truth, leaves me nothing to say on that head. Some present may not be aware that, in the earlier years of this Society, members subscribed to defray the expenses incurred by its meetings; but for years back, the College of Surgeons has thrown its protective ægis over the Society, and admits all gentlemen elected to membership free. After the elaborate, comprehensive, and instructive addresses to which I have just referred, I have had some difficulty in finding matter for the Address which I have now the honour to deliver before you.

The advantages arising from such Societies as ours, it is not easy to over-estimate; indeed, these advantages are so generally recognized, that we find similar associations widely established both at home and abroad. They furnish the readiest means by which anything new, or otherwise interesting in medicine or surgery, may be communicated to the Profession, and be submitted at once to that thorough ventilation and searching scrutiny, whereby its real value may be tested and ascertained. In all subjects nearly affecting man's material well-being and happiness, it is of great importance that whatever professes to be a new discovery, or a new application of a truth or principle already known, or an improvement upon some method or practice hitherto received, should be carefully examined and its claims upon the attention of the public scrupulously investigated. This applies with especial force to subjects such as those with which we deal, directly affecting, as they do, man's health, his happiness, and his life itself.

In medicine and surgery much is known and much has been done. But they who have studied these most profoundly, and practised them most successfully, are best aware how much still remains to be known and done in both. Many questions which baffled the powers of the

great fathers of our profession centuries ago, still await their solution; and every day new questions are starting up, some of which wholly elude our grasp, while to others we are able to furnish only a partial answer. There is then a wide, and an ever-expanding field, in which the most refined observation, the keenest sagacity, the maturest judgment, and the subtlest analysis of the Physician and Surgeon have ample room to exercise themselves. With what success that field has been cultivated in recent times, and by our own schools in this city, it is almost unecessary to state before this audience. Yet a few examples may not be uninteresting to elucidate this position; and there are two names which come prominently to my recollection as deserving of the honor. These men passed away too soon from amongst us; we can now recal their great merits, without any disparagement to the living.

You all remember the arduous, indefatigable labours of Houston, the able anatomist, the profound physiologist, the great surgeon; in the early years of this Society we find him ever foremost in the path of investigation, discovery, and truth; at the same time a large contributor to other societies and to the journals of the day. It is now twenty-six years ago since he laid before this Society a full analysis of Müller's great work on Malignant Diseases, and unravelled its diffiulties for the benefit and attraction of others. I shall quote his own words, as he modestly speaks of himself, in the introduction to this communication:—"Müller led the way in these researches, many other able investigators are also in the field, and astonishing results are daily being brought to light. Being, myself, possessed of an acromatic microscope of high magnifying power, I have been endeavouring to follow in the wake of these pathologists, and to inform myself as to the accuracy and value of their statements. I have taken every opportunity to make myself acquainted with the microscopic characters of morbid growths; and the object of my present communication is to introduce the subject to this Society, and to exhibit some preparation from the museum, which I regard as illustrative of the several varieties of cancer." I need scarcely say how many able labourers, members of this Society, have since then worked and are still working in the same field of microscopic investigation, with credit to themselves and great benefit to science. We have in the records of this Society, and from the same hand, most valuable papers on anatomy, physiology, pathology, and practical surgery; but these would be too numerous to dwell upon. His name is indissolubly connected with what may be looked upon, I would say, as one of the glories of this College—its museum; here we have a perfect monument of his ability, his judgment, and his power. A glance at the hundreds of preparations stamped with his initials, prove his indefatigable industry, while a more close investigation of them shows his truthfulness in delineating nature's laws, and his perfect acquaintance with all the types of life; the catalogues, containing a description of this storehouse of knowledge, arranged by him, bear the strong impress of a masterhand, and, I trust, the College will before long place a bust of Houston in that museum where he so sedulously worked.

Another member, more recently removed by death, Bellingham, has left his name amongst us likewise imperishably recorded. The records of this Society bear ample testimony to his protecting guardianship. For years he was one of its honorary secretaries, and for years he was a large contributor of knowledge to its members. Numerous, indeed, were the communications which he brought forward both in medicine and surgery. I am certain that every member here will recollect his various interesting, able, and instructive papers on diseases of the heart, which ultimately were presented to the profession in the shape of a large volume. Accuracy of observation, tact in diagnosis, acumen in judgment, steadiness in practice, are all strongly stamped upon the pages of this book. It is, however, with the subject of the treatment of aneurism by compression that this Society and the Surgical School of Ireland will most gratefully remember his name with great honor His views, his reasonings, and his practice upon this problem were conclusive, as to its solution and adoption. Worthily has his bust been placed in the hall of this College. And I fully subscribe to the opinion of Professor Jacob, as expressed a short time ago in his address from this chair:—"I can safely say, his labours in this Society were the principal cause of his having that testimonial erected to his abilities, his industry, and his zealous labours, in the College."

My immediate object now, in connection with the utility of such societies as this, is to insist on the importance of having each alleged discovery in the theory or practice of medicine, each new operation or mode of treatment in surgery, or proposed modification of the received methods, submitted to the calm judgment of those who may be presumed to be best qualified to decide upon their real value, and who will freely and honestly pronounce their opinion about them. The objections which they urge, the difficulties which they raise, the suggestions which they offer, will all tend to the further development and more complete elaboration of the discovery or invention, if it be really valuable. We all know how liable a man is, especially if he be of an enthusiastic temperament, to be biassed in favour of any theory which he has himself constructed, any conclusion which he has adopted after a long and laborious course of investigation. The theory may be purely fanciful, or rest on insufficient induction; the conclusion may be derived from false premises, or vitiated by illogical reasoning; still, the man himself, prejudiced in favour of what has cost him much thought and time, shuts his eyes against all but what he desires to see, and flatters himself that he has done some great thing. Men of our profession are of course not exempt from this common weakness of which I speak. And, therefore, it is well that our supposed discoveries, reasonings, inferences, and methods of procedure, should be minutely criticised, thoroughly sifted, and carefully tested. A fair, manly, straightforward discussion, conducted in the spirit of philosophical inquiry, and animated by the sincere love of truth, will act like the refiner's fire. If there be genuine ore it will come out the more pure when separated from the dross with which it was mingled; if there be none, the process will show that there *is* none; and however the individual may be mortified, the interests of truth will be served.

These are the principles on which this Society was originally founded, by which it has hitherto been guided, and which will, I trust, continue ever to prevail in its deliberations and debates. Charged with the high and responsible functions that we are, we will never, I am sure, suffer a mean rivalry or paltry jealousy to prevent us from cordially recognising and approving anything, whether in the way of theory or practice, which really tends to enlarge the boundary of our knowledge, to systematize what we already know, or to improve our received methods of procedure. There are difficulties and discouragements enough to be encountered by any one who earnestly devotes himself to such a task, without the paralysing influences arising from envious disparagement and ungenerous detraction. May the animating spirit of this and similar associations ever be to cheer and aid the labourer in his work, and ungrudgingly to award that meed of praise which his services in the cause of truth seem fairly to deserve! We must be contented often to labour long and patiently before achieving any great or striking result. The phenomena with which we have to deal, involving all the mysterious agencies of that subtle principle of *life*, whose nature eludes our keenest scrutiny, are infinitely diversified, and for the most part so complicated as to resist the efforts of the most searching analysis to reduce them to their simple elements. General laws, the applicability of which to particular cases may safely be relied on, are with us but few; and in many departments of our science there are as yet none worth the name. What, for example, do we know

of the laws by which epidemics are propagated? Shall we ever be enabled to predict the occurrence of a pestilence with that certainty with which astronomy foretold the re-appearance of those meteors whose brilliancy, a few nights since, lighted up our skies? The conditions of the problem in the one case are all definite and known; in the other the conditions are unknown, and moreover are perpetually changing. But, however this may be, we have still a boundless field before us. Each of us, individually, may do something towards the cultivation of it by patient labour and careful observation, but infinitely more may be done by combined effort and mutual co-operation. This is the fundamental principle of all Associations, as it is of ours. No man is able to bestow minute attention on every department of medical and surgical science, so as to be an equally great authority—an equally eminent writer—on all alike. The range of subjects is too vast for this. Profound knowledge requires concentrated attention and long study. Nor can the same individual strike out and tread many paths of original discovery. Hence the necessity on the one hand of division of labour, so as to get each portion of the entire work more perfectly done; and, on the other hand, of bringing together the various constituent parts, so as to combine them all into one grand harmonious whole. This synthetic process it is the main business of such societies as this to accomplish. To be a great physician or a great surgeon falls to the lot of but few. It requires a number of qualities rare in themselves, and still more rare in combination with each other. Keen observation, fine tact, intuitive sagacity, readiness in resources, boldness in conception, skilfulness in execution, a clear and cool head, a firm and delicate hand—these and other qualifications, which mark the foremost men in medicine and surgery, are natural gifts, and cannot be acquired. But while it is not given to all to be great, there is none who cannot, by earnest, patient work, contribute something to the general stock of our knowledge. Let us, then, labour energetically, each in his own particular sphere; but let us also remember that we are members of a body banded together for the attainment of a common end, and that the best means of attaining it is by united effort and cordial co-operation. It was thus that this Society has already done so much for the advancement of medicine and surgery, and that it now enjoys the prestige of a high name among the scientific Associations of our country.

Be it ours to emulate the labours of those who have gone before us. And when we commit this Society to our successors, may we have the satisfaction of knowing that its reputation is at least as high, and its usefulness at least as great, as when it came into our hands.

STRICTURE OF THE URETHRA ABOUT FOUR INCHES FROM THE MEATUS; SUPPRESSION OF URINE; FATAL COMA.

Mr. B. Wills Richardson brought under the notice of the Society a specimen of stricture of the urethra, apparently the result of gonorrhœa contracted some years previously.

The patient, George Valentine, 52 years of age, from whose body the specimen was taken, was admitted into the Adelaide Hospital at four o'clock P.M. on the 17th of last month, having been recommended to him by his friend Dr. Dockeray of Kiltegan, in the county of Wicklow. I should mention, however, that Dr. Dockeray did not see the patient for a few days previously to his leaving the country to come to hospital, and therefore before symptoms of suppression of urine set in.

Valentine, on being questioned, stated he had not passed any water to signify for some hours; and as he had suffered from retention of urine on various occasions, of which retention he was relieved by Dr. Dockeray, he thought he was similarly affected on the 17th, and redoubled his exertions to get into hospital. In this belief, however, as I shall now mention, he and his friends were in error.

On inquiring about his symptoms, it was ascertained that he passed a couple of drachms of urine a short time after his admission into hospital; but he had no urgent sensation for voiding water, nor straining to do so. Nothing like a distended bladder could be discovered in the hypogastrium; indeed, the abdomen was quite clear to percussion in this region. He, however, complained of deep pain in the true pelvis, and, curious enough, as the sequel will show, he was not tender to pressure in the locality of the bladder.

The small quantity of urine, first alluded to, having been examined, was found to be somewhat whey-like in appearance, and so albuminous that it became semi-solid on the addition of a few drops of nitric acid, much more so than could, he (Mr. Richardson) thought, be explained by the small quantity of pus present in it.

The pulse was slow and laboured; the skin cool, and he was drowsy, and had to be roused in order to get a satisfactory answer from him; the tongue was dry and brown, and the bowels were constipated. We were told by his friends that he never, to their knowledge, had a convulsion, nor was he ever dropsical.

An exploration was made of the urethra, and it was found that the bougie was stopped at about four inches from the orifice.

As it was evident that there was no urine of any account in the bladder, and when we recollected the highly albuminous state of the small quantity of this fluid we were so fortunate to procure, we had no hesitation in concluding that Valentine's kidneys were diseased, and that probably the suppression would be complete in a few hours, and a fatal result would be the consequence.

He was ordered some purgative medicine, but no attempt was made to stimulate the kidneys.

On the 18th, although the bowels were well freed, he was more stupid and somnolent; the pulse was more laboured, and he passed but a few drops of urine. There was no evidence of distended bladder.

On the 19th no urine at all was passed, and he was evidently lapsing into coma, which was complete on the 20th, and he died at half-past eight o'clock, A.M.

The penis, bladder, and kidneys having been removed from the body, the urethra was first carefully examined, when a very tight stricture was found about four inches from the orifice, which the members would see when the preparation was handed round. The stricture is about an eighth of an inch long, having its canal in the centre. Immediately after death it permitted the passage of a very small No. 1 catheter, but at present, owing to the action of spirit, a very small wire can only be got through it. No other stricture existed in the urethra. The bladder is very much contracted, exceedingly thickened, and its mucous membrane when first examined, was of a greenish slate colour. There was about a drachm of whey-like fluid found in it when opened.

The left ureter was very slightly enlarged; the right duct was about its normal calibre.

The kidneys I have not here this evening, as I wished to inject them if possible. In this attempt I completely failed, they were so extremely degenerated and loaded with oil. The injection I used was a modification of Dr. Beale's Prussian blue fluid, and although I did not try the injection until about the time the post-mortem contraction of the vessels should have ceased, I could scarcely get any of the blue fluid into the vessels of the critical structure. Very few malpighian bodies were injected, but I was so fortunate as to get one or two perfect specimens of well filled efferent vessels, which I attribute to the pressure of the morbid deposit in the critical structure, directing as it were, the injection into a few permeable *vasa efferentia*.

On examining portions of the critical structure under the microscope, large quantities of oil globules were discovered, both free between the tubes and also in these ducts themselves. The epithelium was also granular, apparently from the presence of oil. He Mr. (R.) considered the kidneys excellent specimens of fatty degenerated glands. They had not the appearance of diseased kidneys, the mere result of stricture of the urethra, but were good examples of one of the forms of Bright's disease.

The cranium was not examined, but he thought it might be safely assumed that the coma in this case was renal and the result of the pathological changes he had first mentioned.

COMPOUND AND COMPLETE DISLOCATION OF THE ASTRAGULUS—IMMEDIATE REDUCTION OF THE DISLOCATION—COMPLETE RECOVERY, WITH PERFECT MOTION OF THE ANKLE-JOINT.

Dr. Fleming detailed a case of the above complicated injury, and alluded to his former communication to the Society on

the same subjects. He particularly noted the case of Dr. Hadden of Clonakilty, Co. Cork, published immediately afterwards in The Medical Press and Circular. He considered it a case extremely creditable to the promptness of act and the superior judgment of Dr. Hadden. Through his kindness Dr. Fleming was enabled to place before the Society the fragmentary portions of the astragalus which had been removed at the time of the accident, placed *in situ*, and temporarily secured so by Dr. Barker. They constituted the whole of the astragulus. Dr. Fleming read an extract from a letter of Dr. Hadden, in which it was stated that the woman, the subject of the case, had fully recovered with a most useful joint. The subject of the case under the notice of the Society was exhibited to the members. He was a man of middle age, and had anchylosis of the knee-joint corresponding with the injury, permanently good in the extended position. Although less than two months had elapsed since the accident, the large accompanying wound had fully healed, and the motions of the joint were perfect.

DESCRIPTION OF A CASE OF CONGENITAL DISLOCATION OF BOTH WRIST-JOINTS AND RIGHT KNEE-JOINT.

By Dr. Croly.

James Collier, aged 78 years; about five feet six inches in height; a weaver by trade; is married and has children; does not know of any congenital malformation having existed in any member of his family.

Right Elbow-joint.—Flexion and extension perfect; supination cannot be carried beyond the mid-point between the prone and supine position; pronation nearly perfect; radius and ulna slightly curved, the latter forming the arc of a larger circle than the former; the carpus with the hand is displaced backwards, and the hand can be carried backwards to a right angle with the forearm; the lower extremity of the ulna projects forwards and inwards, and apparently unites by its outer and posterior aspect in articulation with the bones of the carpus; the lower end of the radius projects slightly forwards and the hand is thrown outwards; considerable effusion into the carpal bursa, forming a mid-prominence in front of the wrist.

The measurements of the right arm:—From acromion process to olecranon, the forearm—the lower extremity of fourteen inches; radius, five and a quarter inches; ulna, seven and a quarter inches; hand, six and three-quarter inches.

Left Elbow-joint.—Flexion and extension perfect; no pronation or supination allowed; the ulna projects backwards at its carpal end, its articular facette apparently on its anterior surface; the radius projects slightly backwards, and the hand is inclined outwards; much less lateral motion in the wrist-joint of the left than at the right side.

The Right Knee-joint displays a congenital luxation of the head of the fibula, which projects backwards and outwards; the tendon of the biceps projects prominently beneath the skin at the outer side of the popliteal space; the right fibula measured thirteen inches, while the left one was only eleven inches and a quarter.

Left arm measured fourteen inches from acromion to olecranon; left radius six inches along the convexity of the arc; chord of arc, five inches; ulna measured eight inches; hand seven inches.

DISLOCATION BACKWARDS OF THE SECOND PHALANX OF THE THUMB.

Dr. Stapleton wished to bring under the notice of the Society a mode of reducing dislocation of the thumb by manipulation, and without the use of lacs, forceps, or any other of the ordinary appliances.

The patient, a woman about forty-five years of age, returning home about nine o'clock on Saturday night last, tripped and fell, the end of the thumb coming into contact with the ground. When she raised herself, she felt extremely faint from the pain, and believed she only sprained her thumb; the pain continuing severe, she sought relief at Jervis-street Hospital, and as he (Dr. Stapleton) happened to be at the time in the hospital, he at once recognised the nature of the accident, and explained it to the class.

Having heard from Mr. Ledwich of his having successfully reduced a similar dislocation, the usual plans having failed, he (Mr. Stapleton), by placing the edge of a table in the angle formed between the thumb and index finger, the thumb being upwards and resting on its palmar surface, the hand being steadied by an assistant, he pressed the prominent displaced end of the phalanx horizontally forward with the ends of both his thumbs, while with his forefingers he raised the distal extremity of the luxated phalanx, when, in about half a minute, reduction was effected. Chloroform was not administered.

HARVEIAN SOCIETY OF LONDON.

15th November, 1866.

President—Dr. THOMAS BALLARD.

Dr. H. C. Stewart read a Paper on a

CASE OF EMBOLON OF LARGE VESSELS.

Upon two former occasions he had had the honour to read before this Society papers upon "Fibrinous Concretions, or Plugs formed in the Heart, and Great Vessels leading thereto and therefrom." He produced before the Society, this evening, a patient, who, on the 29th October last, came to him seeking relief from bronchitis, and who presented prominent symptoms of a fibrinous deposit slowly taking place in the vena cava superior, and probably extending into the right auricle.

Robert L., æt. 59, married, a labourer in a timber yard, has lived freely in former years but not lately, and has never had rheumatism. He caught cold about three weeks before Dr. Stewart saw him, and took several home remedies, but had not applied for medical advice until now. Complains of chillness, difficulty of breathing, with cough and a copious expectoration; has thirst; tongue slightly furred; bowels constipated; urine scanty and dark-coloured; pulse 96, weak; his lips, nose, cheeks, and ears are of a deep purple colour, and slightly colder than the surrounding parts; general appearance of skin of face and neck deeper coloured than usual; veins of the neck, particularly the jugulars and superficial veins of the chest, enlarged, prominent, and varicose; chest abnormally flattened from before backwards; movements of the chest normal; percussion notes resonant; coarse crackling heard over the greater part of both lungs, particularly the right; slightly-increased impulse with the heart's beat; its rhythm irregular; there is a slight blowing sound or auricular-systolic murmur over the right auricle preceding apex beat.

We cannot, said Dr. Stewart, have any great difficulty in reading this case, when we remember that the venous blood from the parieties of the chest and vertebral column is returned to the heart through the medium of the venæ azygos (*major et minor*), and the superior intercostal vein; the former opening into the vena cava superior immediately over the right bronchus; the latter into the left vena innominata. Any obstruction to the circulation in the vena cava superior would be evidenced by an enlargement of the superficial veins of the chest and neck, as in this case, and produce cyanosis of the lips, cheeks, nose, and ears. For the original cause we must look to his previous life, which was what is called "free," in other words "drunken." No doubt his abnormally-flattened chest may have contributed somewhat to produce disease, by diminishing the internal space required for the healthy performance of the functions of the chest; and lastly, his mode of gaining a livelihood, that of labourer in a timber yard, where he is frequently called upon to carry very heavy loads upon his shoulders.

Since this examination was made he has been relieved of his bronchitis, and is altogether in better health.

Dr. Cock said there was not time to go into the case; but he doubted the inference drawn by the author of the paper, from the symptoms.

Mr. Sedgwick was rather inclined to attribute the cyanosis, &c., to the consequences of some inflammatory condition of the lungs, than to take the view the author did of it.

The "Gazette de France" states that Madame Pillaud has just died at Bergerac (Dordogne) at the age of 105 years. Her son, a priest 80 years old, read the funeral service over her.

Foreign Medical Literature.

A CASE OF CONGENITAL MALFORMATION OF THE HEART.

By J. F. BAERKEN, Leyden, 1865.

Selections from the *Nederlandsch Archief voor Genees- en Natuurkunde*, Deel ii. 2e Aflevering. Utrecht, 1866.

Translated by W. D. MOORE, M.D.Dub. et Cantab., M.R.I.A.,

HONORARY FELLOW OF THE SWEDISH SOCIETY OF PHYSICIANS; OF THE NORWEGIAN MEDICAL SOCIETY, AND OF THE ROYAL MEDICAL SOCIETY OF COPENHAGEN; EXAMINER IN MATERIA MEDICA AND MEDICAL JURISPRUDENCE IN THE QUEEN'S UNIVERSITY IN IRELAND.

In the first chapter of his work, the author communicates the history of the case, and the anatomical description of the heart. The child in whom the abnormal heart was found died five weeks after birth, with cyanotic symptoms, dyspnœa, diarrhœa, &c. The impulse of the heart was very strong.

On opening the body the heart was found much enlarged; seen from before it had about the form of an equilateral triangle. The posterior surface was reniform. There was no auricular septum; only on the anterior wall did a large musculus pectinatus indicate a trace of partition. Close to a right, well-formed auricula a vena cava superior dextra opened, and immediately adjoining it two pulmonary veins entered from the right lung. In the left division of the auricle were the openings of a *vena cava superior sinistra* and two pulmonary veins. The left auricula was well formed. On the posterior wall of the auricle the two mouths of *two* venæ cavæ superiores were found.

There were two ventricles separated by a perfect ventricular septum. The cavity of the ventricle lying to the right was small, and its walls were slight. The artery issuing from this ventricle curved backwards over the *right* bronchus; in its course and ramification it corresponded to the aorta. After being joined by the still completely open and wide ductus Botalli from the pulmonary artery, it became much thicker than it was at its origin. From the left ventricle proceeded an artery, completely corresponding to the pulmonary artery, dividing into a branch for each lung and the ductus Botalli.

In the second chapter the author gives a short sketch of the normal development of the heart, and comes to the conclusion that our knowledge is not yet sufficiently advanced to explain deviations such as that now described. That at the time of the formation of the partition in normal cases, a torsion of the heart from left to right takes place, is very certain. The absence of this torsion may account for the position of the origin of the aorta and of the ventricle to the right, and of the pulmonary artery and its ventricle to the left, but a number of facts remain unexplained, the course of the aorta over the right bronchus, the opening of the pulmonary veins with the venæ cavæ into the same cavity, &c. The author then also endeavours, setting aside the causes of the abnormal development, especially to answer the question, whether, in a case like his, we may speak of *transposition* of the arteries proceeding from the heart.

The unintelligible reasonings bearing upon this point, to be found at pages 16 and 17, lead to the conclusion that the better course is to speak of *perversion of site*. True transposition would, this appears at least to be the author's opinion, exist only if, in an otherwise normal heart, an artery should arise from the left ventricle, and ramify in the lungs, while the pulmonary artery (that is, the artery arising from the right ventricle, which would therefore receive the blood from the venæ cavæ) should divide as an aorta through the body (!)

In his case the author cannot decide which is to be called the right and which the left half of the auricle, as appears from the stated relations of the veins to the single cavity.

In the third chapter we find a description of the circulation and of the distribution of blood in the case related. The absence of a partition between the right and left auricle caused a constant admixture of arterial and venous blood after birth. Moreover, the auriculo-ventricular orifice of the aortic (in this instance the right) ventricle was very narrow, so that much more blood was driven into the pulmonary artery, which then passed again, in part, through the ductus Botalli into the aorta. The absence of the auricular septum and the narrowness of the ostium venosum of the aortic ventricle were the cause of this course of the blood, while the results (cyanosis, bronchial catarrh, cold extremities, defective nutrition) may be directly explained by the abnormal circulation.

ON A CASE OF OSTEO-SARCOMA TELANGIECTODES; AN ACADEMIC THESIS.

By B. J. Winkelman, Leyden, 1865.

In a healthy workman a tumour had been developed after an injury on the inside of the humerus close to the elbow-joint. The tumour had increased in size for sixteen years after the injury, when, in consequence of a fall, fracture of the arm on a level with the tumour rendered amputation necessary.

The tumour seems to proceed from the os humeri, and communicates with the medullary cavity, while on the inside the compact substance of the bone has entirely disappeared.

The central and most solid part of the tumour consists of closely accumulated cells, and exhibits great vascularity. The surrounding tissue is looser, consists of similar cells, and is furnished with many openings. The walls of these openings present the structure of those of the capillaries—namely, a structureless transparent membrane, provided at regular intervals with nuclei. As these openings at the same time everywhere contain blood, the author thinks that they have proceeded from vessels the walls of which have coalesced. Within the tumour bony tissue is in some places met with. The whole tumour is enveloped in a fibrous capsule.

The author, on comparing this with two similar cases, one described by Lebert, the other by D. J. van Kaathoven, comes to the conclusion that this tumour has taken its origin from the spongy substance of the bone, and that its pressure has caused the compact substance to atrophy. From the extensive vascular development, which in this instance gives a peculiar character to the sarcoma, the author derives the name *osteo-sarcoma telangiectodes*.

ON THE TEMPERATURE IN INFLAMMATION OF THE LUNG.

By S. Doedes Breuning.

The academic thesis of Dr. B. comprises—1st, a short "Historical Review" of our knowledge of inflammation of the lung. In this the author refers especially to the importance of thermometrical observation in pneumonia for comprehending the morbid process in its integrity, and the state of reaction in the system, as thence the typical character of the disease is recognised. The thermometrical results obtained by Wunderlich in the three typical forms of pneumonia are briefly stated. In the Second Part, "General Considerations upon the Elevated Temperature in Inflammation of the Lung," the author endeavours to show that the increased production of heat in pneumonia must be considered as the result of continued oxidation in the blood, and not of increased consumption of oxygen in the tissues. In the third chapter six cases of pneumonia are communicated from the clinique of Prof. von Geuns. The results of the thermometrical observations, obtained in these cases, quite agree with what is taught by Wunderlich. At the end of the last chapter, "Epicrisis,"

the author directs attention to the favourable influence which tartar-emetic seems to have exercised, in some of the cases described by him, on the diminution of the temperature. In this respect the remedy deserves a place not below but next to digitalis, which, on account of its disagreeable concomitant effects, is probably less to be recommended.

ON BUTTERMILK AS FOOD FOR CHILDREN UNDER ONE YEAR. By Dr. A. M. Ballot. (*Ned. tijdschr. voor Geneeskunde*, 2 afd. 4 afl.).

To find a good substitute for the mother's milk has been the object, and justly so, of many trials and investigations. Circumstances often occur, under which it is difficult or impossible to have children reared by the mother or a nurse. The most natural substitute, and that which is also most in use, is cow's milk. This is often prescribed diluted with water, the quantity of which is specified, and usually with a little bicarbonate of soda. We can indeed determine the quantity of water which is to be added, in the house where the child lives, to the milk, but we cannot then be absolutely sure of the composition which the milk so diluted will have. Even if we do not take into account the differences which may be in the milk as it comes from the cow (food, time of year, period after calving), we find a very great difference in the milk which we buy at different times from different dairymen. Analyses of different kinds of milk in Rotterdam gave the following extremes. In 1000 parts the contents amounted to

	Max.	Min.
Of Casein	66·51	54·33
„ Butter	38·00	21·92
„ Sugar of Milk	34·63	27·5
„ Ashes	5·50	2·96
„ Solid Constituents	137·48	110·00
„ Water	890·00	862·52

If we now compare with the mother's milk the food which the child gets, under the ordinary prescription of one part of cow's milk to two of water, we obtain for Rotterdam the following table:—

	Good Cow's Milk diluted in the proportion of 1·2.	Bad Cow's Milk.	Mother's Milk.
Casein	24·0	11·0	34·3
Butter	12·0	7·3	25·3
Sugar of Milk	17·7	8·8	48·2
Ashes	2·4	0·7	2·3
Solid Constituents	47·0	37·0	116·4
Water	953·0	963·0	883·6

It will be seen that this artificial food cannot be called excellent. On its use accordingly often follow vomiting of large masses of casein, diarrhœa, and atrophy. In general it is borne only by children with a strong constitution. Seeking after a more suitable substitute for mother's milk, the author found that Prof. Simon Thomas of Leyden, employed as such buttermilk with flour. Although somewhat surprised at this he determined also to make a trial of it, which gave a favourable result that was confirmed by subsequent experiments, so that this method of feeding has now, after two and a-half years, been generally adopted in Rotterdam. The analysis gave as:—

	Maximum.	Minimum.
Of lactic acid	4·50	0·9
Sugar of Milk	37·14	16·82
Casein	50·95	36·40
Salts	8·00	4·40
Butter	4·72	0·21
Water	933·84	906·67
Solid Matter	93·33	66·66
Lactic acid after 24 hours	5·49	2·06

We see the difference between them and that with mother's milk is not less than with the diluted cow's milk, and yet buttermilk seems to be better borne. How is this to be explained? Ballot thinks that the cause lies in the lactic acid. By it the milk is already partly digested, the casein coagulated in a finely divided state, forms no large masses, which in the use of cow's milk irritate the stomach. If buttermilk be again vomited, it is in a somewhat altered state. Some persons add a little butter to the milk, to supply the want of fat. But this seems not to be necessary; the fat needful for the system appears to be formed from the carbo-hydrates. The mode of administration which Ballot adopts is this: he takes buttermilk, preferring what is not too sour (there are those who think this is a desideratum) and adds wheaten flour, or if the bowels be rather free, rice flour, in the proportion of a tablespoonful to a pint and three quarters (a litre) of buttermilk; with constant stirring he brings this very thin pap to the boiling point, and allows it to boil with constant stirring for five minutes; when all is done he adds sugar to the taste. He commences the use of this very early, even in the third week. He accustoms the children gradually to the taste, giving them at first for a couple of days a few egg-spoonfuls; so soon as they get a liking for it he passes over to the bottle. The buttermilk is given lukewarm; the children almost always take to it. When this point has been attained he gives them twice a day as much as they wish, after which they must rest rather longer than after sucking. He gives it in all cases where the suck is insufficient or not good, and does not discontinue it on account of diarrhœa or other diseases, which can be treated as well under the use of this food as of suck. Lastly, in the buttermilk feeding we have this advantage, that the so much dreaded weaning fit is avoided.

Correspondence.

REMARKS ON CHOLERA IN THE EAST-END OF LONDON.

TO THE EDITOR OF THE MEDICAL PRESS AND CIRCULAR.

Sir,—As I have had opportunities of observing the progress of cholera in the East-end of London, more especially in the Parish of Bethnal Green, it may not be out of place or presumptuous in me to state my views regarding the present epidemic, and the treatment adopted at the Winchester-street Dispensary during the time it was open. I acted as Medical Visitor, and with three assistants attended 7000 cases in six weeks, 130 being cholera, many choleraic diarrhœa, and the remainder diarrhœa; besides the above number I have seen 30 cases in private practice—making a total of 160 cases, most of which occurred in districts badly drained, and where there was a deficiency of water to meet the demands of common cleanliness; also in houses where the filth of years had been allowed to accumulate on the walls without being brushed off or whitewashed (in one or two cases the houses had not been thoroughly cleansed for over twenty years), and in some parts from friction the walls were so polished that they might well have served as a looking-glass. The district, I might more especially mention as having been the occasion for the above remarks, was Hare-street, in which street a greater number of cases occurred than in any one in my district, though some houses and streets, even worse than Hare-street, seemed for a time to escape cholera; but sooner or later they also were visited if not so severely as Hare-street.

It is not my object in mentioning the above state of the houses to try and form a theory as to the cause of cholera, and to mention the filthy habits of the people, and the want of sanitary reform in the East-end of London as being the cause of the epidemic, for were I to do so I should go nearer the west, having acted as Assistant in the West London Union for some time. I am well acquainted with both districts, so it is my intention simply to state that whether cholera depends on, or is caused by dirty houses, the filthy habits of the people, or impure water, that active measures ought to be taken by Government to remedy the evil, by appointing visitors to see that the houses in districts known to have been the dens of fever are regularly cleansed at stated periods; for, sir, thoroughly as I believe

filth to be the hand-maid of cholera, so do I believe it necessary that an official inspection of houses be made, and in saying so I do not ignore the valuable services of the Medical Officers of Health, who have done so much to stay the ravages of the disease, and I believe Dr. Sarvis, the indefatigable Officer of Health for Bethnal Green, to be worthy of all praise, for the promptitude with which he has acted during the epidemic; and not one of the least of the services rendered by him was the establishing of three dispensaries, in which over twenty-two thousand patients have been relieved, still I say there ought to be a system of inspection carried on more efficiently than at present by the Inspectors of Nuisance. The system of house-to-house visitation has doubtless done much good—in fact an incalculable amount of good—as houses which were buried in filth are now something like habitable; however, much remains to be done, but although as many as thirteen hundred houses have been visited by three assistants and myself in a week, I am impressed with the idea that, strictly speaking. much of the visiting done by medical men during the epidemic ought to have been done by the Inspectors of Nuisance, and that at a time when not excited by the presence of cholera, so as to do some little towards diminishing it altogether: but, sir, that the visiting done has been the means of diminishing the epidemic will be admitted, and the very fact of twenty-two thousand having been treated at three dispensaries in only a few weeks is sufficient proof that the vestry were right in carrying out the recommendations of their medical officer. It will also be admitted, though the Registrar-General seems to have overlooked the important fact when he attributes the sudden decline of cholera to the improvement in the water, which was found to be polluted, and, although I fully believe with him that polluted water had its share in the production of cholera, still I cannot close my eyes to the fact that the very week cholera reached its maximum, the three dispensaries were opened, at Nichol's-row, Winchester-street, and Grattan-terrace. At Winchester-street the number of applicants on the second day after it was opened numbered 587; the rush was equally great at the other dispensaries, and if it be taken into consideration that each place was regularly besieged day and night for the first fortnight after they were opened, I think it but right to conclude that the treatment of premonitory diarrhœa was certainly an important element in diminishing cholera, a fact which ought to be kept prominently in view, so that in case of another outbreak, local authorities, especially vestries, may be alive to the necessity of providing for the poor on such occasions at the very commencement.

Regarding the treatment adopted at the Winchester-street Dispensary (without condemning, as Dr. Kidd seems inclined to do, all who differ with him respecting the treatment of cholera cases, and that in a weekly paper, see *Morning Advertiser*, August 18, 1866), I have adopted all kinds of treatment—both the astringent and eliminative—and have found patients derive benefit from both modes, but am fully convinced that I have seen more benefit derived from the administration of chlorate of potash, in the form of powder, than from any single drug, and in some cases the effect has certainly been remarkable, oftentimes relieving sickness and bringing about reaction in extreme cases of collapse; still I would not have any one believe that chlorate of potash was infallible more than castor-oil, or any astringent, but what I say is (and there are other medical practitioners who can say the same) that chlorate of potash, combined with a judicious administration of astringents where the dejections are frequent has given better results, and a large per centage of recoveries (I am below the mark when I say seventy-five per cent.), than either plan of treatment alone.

The *modus operandi* of the drug I don't pretend to explain, as there are conflicting views respecting its operation; but surely, sir, we are not to weed the Pharmacopœia of drugs known to be of great benefit in cases of scarlatina, cancrum oris, &c., because its *modus operandi* can't be chemically explained, although from the sudden change of the countenance and fingers, from being blue or livid, to their natural colour, I am inclined to think that, chemically, it does act, as generally supposed, by oxidizing the blood; but if we ignore such a statement from the fact that it is not supposed to be absorbed, then I believe it probable (taking into account the large amount of chlorine introduced when given in the form of powder)—a form I always insist upon—that besides introducing into the system, and making up for what is known to be thrown off largely in the excretions of cholera patients (chlorides), that some chemical change takes place, or its action upon the periphery of the nerves of the stomach and intestines is such that by reflex action the beneficial effects described are brought about, and one which I ought to have mentioned is the large quantity of urine voided.

I have been led to give the chlorate of potash in powder in cases of cholera from having observed its different effects, in the form of solution and powder, in cases of ulceration of the tongue. Some time since I had two or three very bad cases of ulceration of the tongue and pharynx under treatment, and had tried a solution of the chlorate of potash without the least improvement in the appearance of the ulcers, although containing the solution of chlorate of potash, for six weeks. At this time one of your correspondents mentioned the circumstance of his having had under treatment a similar case, which did not improve while using a solution of the drug, but rapidly got well by sprinkling the ulcers over with the powder two or three times in a day, so I at once tried the powder, as mentioned in the cases under treatment, and was pleased to find the ulcers get rapidly well.

I am aware that chlorate of potash has been given in cholera cases, in solution, but am not aware that the powder has been given, and that given in solution it is but little thought of; but, setting aside the fact that the powder mixed up in a little jelly is much more readily retained on an irritable stomach than the same quantity in solution, I imagine it quite possible, and even probable, that the powder, being the most concentrated form, may act by chemically decomposing the intestinal secretions, or, as I said before, by acting on the sympathetic system of nerves, and so altering the character of the secretions; and if so, the different effects of the drug may be as great in cases of cholera as in cases of ulceration of the tongue; so I can readily understand the fact of its failure as hitherto used in the form of solution, and think it deserves further trial before being condemned.

The mixture generally used at the dispensary was tr. opii minims v–10; T. capsici gtt. i; T. catechu 5ss; æther chloric minims x to xv; with mist. creta to an ounce; and that seemed to check the diarrhœa in the majority of cases; but if the disease ran on to the second stage, I generally used to alternate the mixture with powders of chlorate of potash, or gave the potash alone without the mixture if the diarrhœa had ceased or was abating.

In cases where the patient complained of pain in the bowels, a feeling of constriction as if tied around the waist with a cord, sickness, and cramps, but no diarrhœa, then tr. of opium and castor-oil acted well; but as I have not used castor-oil sufficiently extensive to justify my expressing a decided opinion as to its effects, all I can say is that as opium was only given in sufficient quantity to relieve pain. I attribute the beneficial effects, and especially the relief afforded when the bowels were relieved, to the eliminative effects of the oil.

But, sir, strongly as I have spoken of chlorate of potash, and convinced as I am that much good has been done by its administration, I believe the time has not yet arrived to place reliance upon any one drug, but feel confident that we may at no distant period find cholera to be as amenable to treatment as pneumonia, or fever—to which it is more nearly allied—is in the present day.

C. C. Richards, M.D.

Brick-lane, Bethnal-green, December, 1866.

MEDICAL INSPECTORS.

TO THE EDITOR OF THE MEDICAL PRESS AND CIRCULAR.

Sir,—The question I took the liberty of asking a year ago still presses itself on the notice of an observer—What has become of the Medical Inspectors? We hear a good deal about their appointment, &c., through your columns, and from other sources, but so far as seeing them, or any service to some parts of the country from their existence, is concerned, they might be as well among the myths of bygone ages. I am not inclined to place a very high value on the services of those gentlemen. Nevertheless, they did constitute a kind of arbitership, to which an honourable-minded medical officer might have recourse from time to time in the discharge of his duty to the poor, and in the assertion of his own just rights and privileges, without the somewhat obnoxious course of writing to the Commissioners, which is the

only one now left to him. It is true that to those medical officers who fall in with the views of the ratepayers in keeping down the rates to the lowest possible figure, things go on very smoothly—albeit the poor are neglected and stinted in the necessaries of both food and medicine which the law contemplates supplying them with, and are sometimes left to the care of (it may be incompetent or careless) subordinates; while the man who draws the salary which the law appropriates for their attendance, is engaged among the rich, or with his farm, or merchandize. But, sir, there are some medical officers, I take pride in believing there are *many*, who having engaged for a certain salary to give medical attendance to the poor of a district, and as far as in him lies, to avert therefrom pestilential diseases, applies himself in earnest to that as his chief duty, in the discharge of which he sometimes incurs both opposition and odium, because haply he considers the lives and health of the poor and labouring class of more importance than a few shillings more or less on the rates.

This, you will agree, is rather a lamentable state of things. The Registration Law, however perfect in the lapse of years it may become, as yet forms a very inadequate test of the sanitary condition of the country, and its returns seem calculated to mislead the public, and perhaps to lull the Commissioners into too great a security as to the working of the poor-law machinery. The administration of the relief to the sick poor is left much as it was in former times—*i. e.*, between the local governing bodies (boards and committees) on the one side, and the medical officers on the other; but with this difference and disadvantage, that whereas under the old system the contributions were voluntary, and there was consequently no antagonism between the contributors and the doctors, who were thus placed in a position more favourable for the good of the country. Under the present system the contributors—*i. e.*, the ratepayers—are under compulsion to support the doctor, who is therefore liable to be regarded as a Government officer forced on and supported by the people, and therefore to be made the most of at the least possible expense either of money or courtesy. As might be expected, the Doctor is too often fain to purchase favour and a quiet life by falling in with the views of cheeseparing guardians—a line of conduct more politic than humane and just to the poor.

The Medical Inspectors *might* constitute a barrier against this degenerating tendency in the working of the poor-law. But they are nearly unknown, not having been seen or heard of, in some districts for more than *five years*.—I remain, sir, your obedient servant,

DISPENSARIUS.

"TELEGRAPHING FOR THE DOCTOR."

TO THE EDITOR OF THE MEDICAL PRESS AND CIRCULAR.

SIR,—No doubt every physician in the habit of receiving telegrams can testify to the truth of the statements made by a writer in your journal of December 19th. As at present managed, the telegraphic service of the country is in a most unsatisfactory state. Last night furnished me with an additional proof of this. A telegram requesting my immediate attendance for a consultation was forwarded, or supposed to have been forwarded, at half-past ten P.M., from a distance of about six miles from Charing-cross. The message was delivered at my house a few minutes before two A.M. It is needless to detail the inconvenience and annoyance caused by such culpable negligence, and it is to be hoped that some system will be devised to obviate the possibility of such occurrences.—I am, sir, &c., A. L.

DISEASES OF THE EAR.

TO THE EDITOR OF THE MEDICAL PRESS AND CIRCULAR.

SIR,—I would suggest to your correspondent "Miser" the advisability of submitting, together with his question of December 19th, a statement of the physical examination of his ear. The *symptoms* he alludes to may be due to very serious causes—mechanical or vital—and therefore no one line of treatment can be recommended with confidence as long as the condition of the external auditory passage, the membrana tympani, the cavitas tympani, ossicula, Eustachian tube, &c., is unknown.—I am, sir, yours obediently,

SPECULUM.

LEGAL INTELLIGENCE.

CHARGE OF ILLEGALLY RECEIVING A LUNATIC PATIENT.

At Bow-street a summons was preferred at the instance of the Commissioners in Lunacy against Mr. George Naylor, Surgeon, of 8, George-street, Hanover-square, charging him with having taken the charge and care of a person of unsound mind, without the proper order or medical certificate. The prosecution was conducted by Mr. Metcalfe, instructed by Messrs. Vandercombe, Law, and Co., solicitors to the Board of Commissioners in Lunacy; and Mr. Harrison, instructed by Messrs. Lewin and Co., defended. Mr. Metcalfe, in opening the case, said the proceedings were taken under the sections 90 and 91 of the Act 8th and 9th of Victoria, cap. 100. It appeared that in October last a young man, whose name he did not mention, being unwilling to make a family affliction unnecessarily public, was sent as a lunatic patient to Southall-park Asylum, with a certificate signed by the defendant. It appeared from it that the defendant had examined him at Deane's cottage, Hanwell, and had come to the conclusion that he was of unsound mind. It was not, however, stated that the defendant, who described himself as a Surgeon practising at 8, George-street, Hanover-square, was also residing at Deane's cottage, Hanwell, and was the person in whose care and charge the patient had been for the preceding seven and a half months. The evidence would show that this was so, Mr. Naylor having signed an agreement by which he undertook the charge, board, and lodging of the patient, providing him with wine, &c., in fact everything but clothing, for £2 10s. per week. At that time the patient had been for twelve years in a state of imbecility, brought on by over-study. In the opinion of Dr. Allen, who had examined him prior to his removal from his father's house to Deane's-cottage, he was incurable. During the early part of his stay at Deane's-cottage he appeared to improve, but in October, as he seemed to be getting worse again, he was removed by his father's suggestion to the asylum. Mr. Harrison cross-examined the witnesses, endeavouring to show that defendant was not aware that the patient's mind was affected until lately, and also that the prisoner was not under his charge (notwithstanding the agreement), but, under that of a widow lady residing at Deane's-cottage. Counsel also suggested that he had witnesses to call, but, on Mr. Vaughan's intimation that unless their evidence was most stringent the case must go for trial, Mr. Harrison reserved the defence, observing, however, that if Mr. Naylor had committed any infringement of the Act it was rather an error of judgment than a wilful offence. The defendant was committed for trial, bail being taken in two sureties of £100 and himself in £200.

Medical News.

PHARMACEUTICAL SOCIETY OF GREAT BRITAIN.—Names of Candidates who passed the Major Examination, December 19, 1866, as Pharmaceutical Chemists:—

Churchyard, Robert Leman, Bungay.
Moussempes, Jules, Biarritz.
Allkins, Thomas Boulton, Tamworth.
Cornelius, Richard Bayly, Clapham.
Ford, Edward Beeks, Hereford.
Johnson, Edwin Eli, Nottingham.

ROYAL COLLEGE OF PHYSICIANS OF LONDON.—At a general meeting of the Fellows, held on Saturday, December 22, the following Member of the College was duly admitted a Fellow of the same:—

Nathaniel Allan Travis, Nice.

At the same meeting the following gentlemen, having undergone the necessary Examination, were duly admitted Members of the College:—

Thomas Tillyer Whipham, M.B.Oxon., St. George's Hospital; Christian Gottfried Heinrich Bäumler, M.D.Erlangen, 10, Finsbury-place, North; Walter Balls Headley, M.B.Cantab., 5, Tavistock-place; Francis Valentine Paxton, M.B.Oxon., West Dean, Chichester; Frederic Bateman, M.D.Aberdeen, Norwich; Robert James Lee, M.B.Cantab., 4, Savile-row.

APOTHECARIES' HALL.—Names of gentlemen who passed their Examination in the Science and Practice of

Medicine, and received certificates to practice, on Thursday, December, 20, 1866:—

Thomas Alpheus Buck (Guy's Hospital), Kennington-park road; John Jenkins (Guy's Hospital), Castleton, near Cowbridge; James Brierley Hughes (St. Bartholomew's Hospital), The Rectory, Congleton; William Frederick Knapp (St. Bartholomew's Hospital), St. Bartholomew's Hospital; George Fred. Sankey (St. Thomas's Hospital), Ashford, Kent; Augustus Constable Maybury (St. Thomas's Hospital), Frimley, Surrey; William Powell (Charing-cross Hospital), Shirley, Southampton; Edward James Pollock (King's College Hospital), Halton Hounslow, W.; Joseph Oakman (Westminster Hospital), Hillside, Wimbledon; William Askwith Rudd (Hull Medical School), Hull; Reginald Ratcliff Hoare (Birmingham General Hospital), Mount-street, Birmingham.

The following gentlemen also on the same day passed their First Examination:—

George Mason, Guy's Hospital; John Carr, Guy's Hospital; Robert Longust Sheffield, London Hospital.

MANFIELD'S PROCESS FOR PRESERVING VEGETABLES.—In this process, which has beed lately patented by Messrs. Burgess and Sons, 107, Strand, London, the pickling of vegetables is effected by means of an apparatus which, after exhausting the articles of the water they contain, forces in the vinegar by atmospheric pressure, and the object of the manufacturer is thus accomplished in a very short time, instead of its occupying several weeks, as heretofore. The vessel in which the vacuum is formed is lined with platinum in order that no metallic impregnation may enter the pickles, and the apparatus is worked by a powerful steam engine.

THE NEW VAGRANT WARDS FOR THE HOLBORN UNION.—This building, which is, we believe, the first of its class erected in London, is now completed and occupied. It is situated in Vine-street, Liquorpond-street, the ground on which it stands having been cleared of buildings for the purpose. Externally it presents the appearance of four ordinary dwelling-houses, the architect being instructed so to plan the structure that in the event of its not being required for the uses to which it is now appropriated it could be readily converted into dwelling-houses, with a range of workshops in the rere. The plan of the interior may be thus described:—There is an entrance-hall, on admission to which the division of the sexes is at once effected, the females passing to the right, the males to the left. Immediately in connection with the receiving wards are the baths, water-closets, and urinals, as also store-rooms, in which the clothes of the inmates are locked up during the night, care being taken first to pass them through the vermin exterminator which has been provided. The sleeping wards, containing ninety-six beds, are in the rere on the ground and one-pair storey, the whole being both lighted and ventilated from the roof, large well-holes having being formed in the floor of the one-pair storey for the purpose. The ventilation, is effected by means of a number of hooded cowls fixed in the roof with rings of gas placed below them to produce an upward current, the fresh air being introduced at the level of the floors. As the building will only be occupied at night, the plan of ventilation adopted would seem to be specially designed to meet that circumstance, depending upon the use of the gas rings in the roof for complete development. No doubt the fact of the front wall being the only one of the external boundaries available for lighting and ventilating the building had considerable weight in determining the use of the roof for these purposes. Be that as it may, the difficulties of the site in this respect seem to have been effectually overcome by the means we have described. Complete supervision over the inmates is obtained by the attendants' room being glazed on all sides, and their being so located as to command a full view of the wards. The labour test would seem to consist of oakum-picking for the females, and stone-breaking for the males, accommodation for both being furnished. Open fireplaces have been provided in all the wards, but this apparently has been done to meet any further requirements arising out of the conversion of the building, since the whole is now heated by means of hot water. A residence for the superintendent and his wife has been erected immediately adjoining the male wards, with a private staircase and entrance from the street. The contract price for the whole was £2662.—*City Press.*

HOW TO LIGHT A DARK ROOM.—If, in a very narrow street or lane, we look out of a window with the eye in the same plane as the outer face of the wall in which the window is placed, we shall see the whole of the sky by which the apartment can be illuminated. If we now withdraw the eye inwards we shall gradually lose sight of the sky till it wholly disappears, which may take place when the eye is only six or eight inches from its first position. In such a case the apartment is illuminated only by the light reflected from the opposite wall or the sides of the stones which form the window; because, if the glass of the window is six or eight inches within the wall, as it generally is, not a ray of light can fall upon it. If we now remove our window and substitute another in which all the panes of glass are roughly ground on the outside, and flush with the outer wall, the light from the whole of the visible sky, and from the remotest parts of the opposite wall, will be introduced into the apartment, reflected from the innumerable faces or facets which the rough grinding of the glass had produced. The whole window will appear as if the sky were beyond it, and from every point of this luminous surface light will radiate into all parts of the room.—*Builder.*

CHOLERA AND QUARANTINE AT MALTA.—The officer administering the government of the island of Malta having received official information that cholera has ceased at Constantinople, Smyrna, and Alexandria, and having heard the opinion of the Board of Health, was, under date of Dec. 17, pleased to direct that arrivals from those ports be admitted to pratique; and that vessels arriving from Naples, furnished with clean bills of health, he also admitted to pratique. By another notice, dated the 18th, he further directs that arrivals from the Sea of Azof, the Black Sea, and the Sea of Marmora, be likewise admitted to pratique; and that vessels arriving from Turkish Albania, Taranto, and its vicinity, be subjected to a quarantine of 15 full days from the date of their arrival.

EARLY STRUGGLES OF MEDICAL MEN.—Dr. John Cheyne, who, a quarter of a century ago, was by far the busiest and best employed physician in Dublin, tells us, in his interesting autobiography, that, during the first half of his second year's settlement in the Irish capital, and when he had already reached the thirty-fourth year of his age, his fees only amounted to about three guineas. Nine years subsequently, he was making £5000 annually. Not above one or two physicians in London ever drew, I believe, a larger professional income, or, perhaps, ever advanced more early into full practice, than Dr. Chambers; yet, during the fifth year of his practice, when he was already thirty-four or thirty-five years of age, he did not receive above £211 in fees. Seventeen years subsequently, his annual professional income is stated to have reached nearly to £9000. His great predecessor in high London practice, Dr. Matthew Baillie, drew above £11,000 in one year; and yet, with all the interest of the Hunters and others to aid him in his outset, his first march upwards was, like that of all others, very slow and difficult, and, to quote the words of his biographer, Dr. Wardrop, before "he found himself fairly established in practice," he had been aleady for twelve years physician to St. George's Hospital, and for nearly twenty years a medical lecturer. Dr. Baillie's uncle, the celebrated Dr. William Hunter, who spent a large fortune, gained by his profession alone, upon the collection of that splendid museum which now enriches the University of Glasgow, was so hard pressed for money, during the years of his earlier struggles in London practice, that he was obliged to postpone for a fortnight the commencement of his third season of lectures, in consequence of not having money enough to pay the expense of the usual class advertisements. Nor have our greatest surgeons been usually more successful than these our greatest physicians, in the first stages of their professional career. In 1788 the son of an English clergyman attended the medical classes of Edinburgh University, and lived on the third flat in Bristo-street, in a room which cost him six shillings and sixpence a week. In after life, when swaying the surgical sceptre of England, as Sir Astley Cooper, his professional income, in one single year, amounted to £23,000; and yet, during the first twelve months after he settled down in London, and was working as a lecturer on anatomy and surgery, his receipts from private practice only amounted to five guineas. The distinguished surgeon who, by Sir Astley's death, was left at the head of the surgical school of London, Sir Benjamin Brodie, did not, as we are told, in a late biographical sketch of him, get into "full practice" till 1825; yet he had been lecturing, practising, and publishing since 1805, or for twenty long years previously.—*Leisure Hour.*

The London Casual Wards.—The active measures which the Poor-law Board took last winter to compel the London Guardians to carry out the Houseless Poor Act have to some extent operated well for this winter, but some facts have come to light showing that the letter as well as the spirit of this benevolent measure of the Legislature, which was passed in order that there should be no excuse for persons wandering about the metropolis without a home, is being wilfully and cruelly contravened. It will be remembered that the Clerkenwell Guardians would not for a long time place themselves under the Act, and provide decent wards for the homeless. By this neglect many additional burdens were thrown upon this heavily-taxed parish, as all the expenses of relieving the casual poor came upon the parish rates, instead of being paid for out of the metropolis rates. This winter, properly-certified wards have been provided in Clerkenwell-close, and the manner in which the law is being administered is best shown in the relation of an occurrence which took place between Saturday night and Sunday morning last, and which will be brought under the notice of the authorities. At a little after midnight on Saturday night, during the fall of a drenching misty rain, two miserable men were seen crouching about the door of the wards. They were interrogated by a passer-by, and they said they had got into town in the evening, and had been directed from place to place until they stood where they did. The onlooker knocked at the door of the wards, and the administrator of the Poor-law answered the knock, and when warned that it was his duty not to turn away applicants for shelter, he would not say why he refused them admission, and, after charging the stranger with the heinous offence of having brought casuals there on a previous evening, he threatened to give him into custody for knocking at the door. One of the casuals appealed to the keeper of the wards to give him a night's lodging. "I have served my country for eleven years," he said, "and it is hard that I cannot get a night's lodging on a night like this." "Then you should look to your country to do something for you" was the rejoinder, and a policeman who came up just before expressed the view that the wanderers should have come before that time. To this the broken-down soldier replied that he and his mate arrived late in the evening, and had last been sent from a place which, from his description, must be the West London Union wards, and had waited for hours before refusal. They could get no lodgings at the Clerkenwell wards, which are placed by the Homeless Poor Act under the express rule that every applicant is to be dealt with in some manner—relieved if necessitous, given into custody if criminal, or handed over to the care of the relieving officer if a parishioner; and the two men wandered forth to seek at the hands of the benevolent, or in some desperate act, the means of existence vouchsafed to them by the Legislature, and thus withheld by the administrators of the Poor-law.—*Times.*

Appointments.

Barbour, Dr. J., L.R.C.S. Ed., has been appointed Resident Medical Officer to the London Fever Hospital.

Cullingworth, Charles James, M.R.C.S. Eng., etc., has been appointed Physician's Assistant at the Manchester Royal Infirmary.

Ellis, T.S., M.R.C.S.E., has been appointed Assistant-Surgeon to the Hospital for Sick Children, Gloucester.

Kelly, C., M.B., has been appointed Resident Medical Officer to the Public Dispensary, Carey-street, Lincoln's Inn.

Nash, W. L., M.R.C.S.E., has been appointed Resident Surgeon and Apothecary to the Buckinghamshire General Infirmary, Aylesbury.

Teevan, Mr., F.R.C.S., B.A., has been appointed Lecturer on Anatomy at the Westminster Hospital, vice Mr. Heath, resigned.

VACANCIES.

Chorlton-on-Medlock and Rusholme Dispensary.—Surgeon.

Cumberland and Westmoreland County Lunatic Asylum.—Assistant Medical Officer.

RESIGNATIONS.

Cuckfield Union.—Fifth district; area 7484; population 2758; salary £50 per annum.

Darlington Union.—Barton district; area 12,935; population 2135; salary £28 per annum.

Nuneaton Union.—Nuneaton district; area 7520; population 7845; salary £55 per annum.

Selby Union.—Townships of North and Skipwith; area 5058; population 769; salary £5 10s. per annum.

Notices to Correspondents.

Communications to the London Editor should be addressed to 20, King William-street, Strand; to the Edinburgh Editor at Maclachlan and Stewart's, South Bridge; and to the Dublin Editor, at 3, Lincoln-place.

Every MS. should bear the Name and Address of the Sender.

All Contributions are attentively considered, and unaccepted MSS. are returned on receipt of stamps for postage; but the Editors cannot be responsible for any accidental loss, nor can MSS. or replies be delivered on personal application.

Contributions should be *legibly* written, and only on one side of the paper.

When proofs are forwarded it is of the utmost importance that they should be corrected and returned without delay.

Communications respecting Hospital Reports should be addressed to "Editor of Hospital Reports Department," London, Edinburgh, and Dublin, respectively.

Dr. Chambers.—Received with thanks. Will be attended to.

Dr. Griffiths.—Postponed.

T. K.—The article reached us too late.

Obstetricus.—Our information was obtained from several distinct and trustworthy sources.

Dr. Clark.—The copies were duly sent.

C. F.—A private note.

Double Facial Palsy.—I observe a case of this kind, treated by Dr. Lyons, reported in The Medical Press and Circular, Dec. 19, 1866. The reporter remarks that "of the rarity of the affection in its double seizure some opinion may be formed from the fact that no mention is made of it in the works of Walton, Trousseau, or Aitken." Mackewin (Practical Treatise on Diseases of the Eyes, 4th edition, p. 184), remarks that "in some cases both sides of the face are palsied;" and refers to Magnus, Müller's Archiv for 1837, p. 258. He adds—"A case of this kind, which I saw, arose from a poor man being maltreated on the road, and kicked on the occiput." Basil.

Sir,—Will you kindly afford space to inquire of any of your readers who, as Union Medical Officer, has held the post of "Medical Visitor" in the provinces during the recent epidemic, what the scale of remuneration from the Guardians has been?—Yours faithfully,

South Devon.

Births, Deaths, and Marriages.

Announcements are inserted without charge, and must in all cases be authenticated with the signature of the sender.

BIRTHS.

Blandford.—On December 18, at 3, Clarges-street, W., the wife of G. F. Blandford, M.B. Oxon, of a son.

Brenchley.—On December 19, at Denmark-hill, Camberwell, the wife of H. C. Brenchley, M.R.C.S.E., of a daughter.

De Chaumont.—On December 16, at Oakland, Woolston, Hants, the wife of F. De Chaumont, M.D., Staff Surgeon, of a daughter.

Jones.—On December 24, at 174, Blackfriars-road, the wife of F. C. Jones, M.D., of a son.

Rose.—On December 11, at San Remo, Italy, the wife of Dr. F. Rose, of a son.

Salmon.—On December 14, at No. 3, Kempt-terrace, Woolwich-common, the wife of J. Salmon, M.D., Deputy-Inspector-General of the Royal Marine Infirmary, Woolwich, of a daughter.

MARRIAGES.

Booth—Hunt.—On December 18, at St. Lawrence's Church, Measham, Derbyshire, J. Webb Booth, M.R.C.S.E., L.S.A., to Isabella, third daughter of the late G. Hunt, Esq., Measham.

Davis—Nixon.—On the 25th September, by the Rev. J. A. Welsh Collins, B.A., Chaplain to the Forces at Sedgebrook Grange, Wauganui, New Zealand, the residence of the bride's father, James Davis, Esq., L.R.C.S.I., Assistant-Surgeon H. M. 57th Regiment, to Clara Agnes Elizabeth, third daughter of John Nixon, Esq.

Fleming—Mathers.—On December 20, at Partick, near Glasgow, J. M. Fleming, M.D., her Majesty's Indian Army, to Catherine Rennie, eldest daughter of A. Mathers, Esq., Secretary Clydesdale Bank, Glasgow.

Miller—Phipps.—On December 10, at Galle Face Church, Colombo, Ceylon, Staff Surgeon C. M. Miller to Mary A., daughter of the late Mr. E. Phipps, of London.

Stanley—Robinson.—On November 3, at Trinity Church, Kurachee, Scinde, East Indies, by the Rev. H. W. Bagnell, M.A., St. John Stanley, Staff-Surgeon Army, to Emily, youngest daughter of the late Rev. C. W. Robinson, M.A., formerly of Leominster, Herefordshire.

DEATHS.

Dandy.—On December 21, at Rufford, near Ormskirk, C. Dandy, M.R.C.S.E., aged 74.

Haslewood.—On December 9, W. Haslewood, M.D.Edin., of Darlington, Durham, aged 64.

Jackson.—On December 14, at 44, Upper Brook-street, Manchester, R. Jackson, M.R.C.S.E., aged 43.

Noel.—On December 6, V. E. Noel, M.R.C.S.E., of Westbury-terrace, Plymouth.

Tait.—On December 20, at Enfield-highway, R. Tait, Surgeon, aged 71.

Original Communications.

CASES OF SOFTENING OF THE BRAIN.

By JOHN W. OGLE, M.D.,

PHYSICIAN TO, AND LECTURER ON MEDICAL PATHOLOGY AT, ST. GEORGE'S HOSPITAL, ETC.

(Continued from page 637, vol. ii., 1866.)

SOFTENING OF THE SURFACE OF THE RIGHT HEMISPHERE OF THE BRAIN; SLOUGHING OF THE DURA-MATER, FOLLOWING A SCALP WOUND; TETANUS-LIKE SYMPTOMS ON THE LEFT SIDE OF THE BODY.

Case 112.—George C., aged 29, an intemperate man, was admitted March 17th, 1859, having sustained a fracture of the clavicle and a scalp wound in front of the right ear, the bone, however, not being exposed. Since the accident he had lost the sense of hearing in the right ear. Fever came on, followed by delirium, for which salines and opium were given. Eight days afterwards violent delirium came on during the night, and twitchings of the *left* side of the face. The tongue was dry and brown. Much puffiness of the scalp existed, and purulent fluid was evacuated. Pain came on in the left hand, also the left side of the body, and the left thigh, and there was a *spasmodic condition of the left side of the body, resembling tetanus.* Abscesses formed in the thumb, and on the wrist, which were opened, and a fulness of both lips was observed. On the 31st he became more delirious, but answers were rationally given, and there was no headache. Abscesses formed about the injured clavicle. Delirium continued, and he died April 3rd.

Post-mortem Examination.—The membrana tympani was found to contain an opening, but the tympanum was uninjured, as were also the cranial bones; but, corresponding to the scalp wound and the centre of the right cerebral hemisphere, a small patch of the dura-mater was in a sloughing condition. The surface of the convolutions of the brain at this part was softened to about the size of a sixpenny piece in area, and to a slight depth in extent. At this spot the membranes were agglutinated. In other respects the brain was healthy. *Thorax.*—Several ribs, in addition to the clavicle, were found to be fractured, and a quantity of pus in connection was only kept out of the pleural cavity by the pleuræ. Abscesses were found connected with either hip-joint. (68.)

SOFTENING OF THE CENTRAL WHITE PARTS OF THE BRAIN; DISEASE OF THE KIDNEYS, AND EMPYEMA, FOLLOWING SCARLET FEVER.

Case 113.—John B., aged 4, was admitted April 15, 1859, for a slight burn. Whilst in the hospital he contracted scarlet fever, and went on well, until dropsy came on, and albuminuria, with effusion of fluid into the chest. Drowsiness came on, and the dropsy quite disappeared. Convulsions supervened before death, which occurred August 7th.

Post-mortem Examination—Thorax and Abdomen.—The kidneys were very much diseased, and much fluid, with pus, was found in the pleural cavities. *Cranium.*—Much, rather turbid, fluid existed in the ventricles, and beneath the arachnoid membrane. The fornix and septum-lucidum were so softened as to be in a shreddy, broken-down condition. (184.)

SOFTENING OF THE FORNIX; DISTENSION OF THE CEREBRAL VENTRICLES; DELIRIUM, FOLLOWED BY HEMIPLEGIA ON THE LEFT SIDE.

Case 114.—George R. was admitted December 10th, 1859. He had enjoyed excellent health, but for a week had had a slight cough. In the middle of the night before he came to the hospital he was found talking nonsense, and insisting on walking down stairs, and when admitted he was quite absorbed in himself, heedless of surrounding objects, but not wholly unconscious. The left cheek was flapping, and there was *in*complete paralysis of the left arm and leg, the skin of the left side being cold, and he was often fumbling the bedclothes with the left hand. The pupils were natural. There was decided dysphagia. On the 11th the evacuations were passed unconsciously. Stertor and a fixed and contracted state of the pupils came on, the left one seeming rather the larger, and he died on the 15th.

Post-mortem Examination—Cranium.—The bones of the skull were very thick. The brain-substance was firm and natural in all parts except the fornix, which was so softened as to be almost diffluent. The lateral ventricles were large and distended, but equally so, with fluid. The arteries at the base of the brain were atheromatous. The other organs of the body were not examined. (269.)

SOFTENING OF THE SURFACE OF THE LEFT CEREBRAL HEMISPHERE, FOLLOWING INJURY TO THE HEAD; HEMIPLEGIA ON THE RIGHT SIDE.

Case 115.—William B., aged 52, was admitted August 29th, 1862. He had been very intemperate, and two months previously had been struck on the head with an iron gate, being rendered insensible by the blow. A superficial wound had been caused that healed quickly. He recovered at the time, and went on well until a week before admission, when he suddenly fell down in the street insensible. Being seen by some medical man, leeches to the head and purgatives were resorted to, but he was admitted to the hospital in a state of unconsciousness, with absolute loss of power, and diminished sensibility of the skin of the *right* half of the body. The *right* eye was more open than its fellow, and its pupil was more dilated than that of the other eye; there was, also, occasional strabismus, and the breathing was stertorous. The temperature of the surface of the body was the same on both sides. There was much dysphagia, and the evacuations were passed involuntarily. The sounds at the base of the heart were rough, but free from bruit; the urine was albuminous. He was treated with purgatives, and cold applications to the head. Noisiness and great restlessness came on, and afterwards bed-sores. Later on he had somewhat more of consciousness; but the pulse subsequently became quick and irregular; he became suddenly attacked with severe dyspnœa, followed by coma; and in spite of stimulants, counter-irritants, &c., collapse came on, and he died September 7th.

Post-mortem Examination—Thorax.—The aorta was atheromatous, otherwise the organs were natural. *Abdomen.*—One of the kidneys was found to contain calculi, as also one ureter. *Cranium.*—A scar existed on the scalp, on the left side of the head, and corresponding to this part, on opening the cranium, the dura-mater was found to be adherent to the skull. The arachnoid membrane, generally, was thickened, and in parts opaque; much fluid existed beneath the membrane, especially on the left side, where the cerebral convolutions (both white and grey matter) were softened, the grey matter near the surface being of a very yellow colour. The posterior part of the middle lobe was mainly affected, and here was observable a small spot of bloody ecchymosis. The other parts of the brain were natural. (242.)

SOFTENING OF THE FORNIX AND SEPTUM-LUCIDUM; DELIRIUM TREMENS; SUDDEN DEATH.

Case 116.—George B., aged 30, was admitted October 6th, 1862, in a state of delirium tremens, having had no sleep for two days. He was sweating much; his pulse was 82, and very weak. Opium and ammonia were given. The next day he was incoherent, and had to be confined down in bed. Tartar-emetic was given every hour. In an attempt to struggle and free himself from restraint he fell down dead.

Post-mortem Examination—Thorax and Abdomen.—The liver was in a fatty state, and the capsules of the kidneys

rather adherent. The other organs natural. *Cranium.*—The cerebral veins were distended; the brain, generally, was "wet," and much serum existed in the ventricles. The fornix and septum-lucidum were decidedly softened. (277.)

EXTENSIVE SOFTENING OF THE BRAIN; COMA BEFORE DEATH.

Case 117.—John P., aged 45, a very intemperate man, had nevertheless enjoyed good general health, until a week before admission into the Leeds "House of Recovery" (Fever Hospital), August 10th, 1862, when he was noticed as becoming altered in his behaviour, staring about, and being very absent in manner. On the day before admission he came down stairs dressed with two large scarfs about his head, but was persuaded to remain indoors, and sat down, apparently unconscious. On admission he was very stupid, and it was impossible to get a sensible answer from him. There was no history of insanity in his family. A blister was applied to his neck, and cold applications to the head, and he was well purged. He was more conscious the following day, but soon relapsed into complete insensibility, and the urine had to be drawn off with the catheter. He died the eighth day after admission.

Post-mortem Examination—Cranium.—The cranial bones and cerebral membranes were natural. The blood-vessels of the brain were very much congested throughout its entire substance. Both cerebral hemispheres were extensively softened throughout their entire substance, and the fornix and septum of the ventricles were quite diffluent. The corpora-striata and thalami-optici, though highly congested and diminished in consistency, were not at all easily broken down. The cerebellum and pons Varolii were healthy.*

SOFTENING OF THE SUPERFICIAL CEREBRAL CONVOLUTIONS, WITH YELLOW DISCOLORISATION; SYMPTOMS OF FEVER, FOLLOWED BY PNEUMONIA.

Case 118.—Robert H., aged 35, was admitted January 14th, 1863, with well-marked symptoms of typhus fever. There was great contraction of the pupils, and extreme stupor came on, with involuntary passage of the stools. For a time he became so far rational as to answer questions, but relapsed into noisy delirium. After a time, he recovered his mental condition, but pneumonia and pleurisy set in, and he died January 29th.

Post-mortem Examination—Thorax and Abdomen.—Abscesses of the lung and pleural adhesions were found, and the spleen was in a very pulpy state. *Cranium.*—The dura-mater, generally, was adherent to the bone. On the surface of the cerebral convolutions of both hemispheres small patches of yellow discolorisation (as of blood extravasations of old standing) existed. The brain immediately below these parts was somewhat, but decidedly, softened to the depth of about one-eighth of an inch. (25.)

SOFTENING OF THE LEFT CEREBRAL HEMISPHERE BELOW THE CORPUS-STRIATUM; PLUGGING-UP OF MANY INTRA-CRANIAL ARTERIES; PERFORATION OF A MITRAL VALVE-FLAP.

Case 119.—Margaret Reid, aged 43, was admitted November 29th, 1863, in an "apoplectic fit." She had never had one before, and the present attack was preceded by giddiness, though not of long standing. The limbs on the *left* side of the body were quite paralyzed, and the *right* leg was frequently drawn up, whilst the right hand was constantly being raised up to rub the face. A little beef-tea was swallowed with difficulty. She sank within a few hours of admission; no return of consciousness having taken place.

Post-mortem Examination.—The aortic and mitral valves of the heart were much diseased, and the latter much destroyed by fibroid deposit, contained a round buttonhole-like opening. No recently formed fibrine could be found on any of the valves or surfaces of the cavities of the heart. A few old pleural adhesions existed. *Abdomen.*—One of the kidneys contained several calculi. *Cranium.*—Dura-mater firmly adherent to the skull. The veins on the surface of the brain were very distended, and the white cerebral matter was very vascular. Immediately under the surface of the left corpus-striatum was a small circumscribed portion of brain tissue, which, retaining its colour, had quite lost its firmness, and was in a porous and spongy condition. This condition existed to an extent of about the size of a hazel nut.

Microscopical Examination.—The softened part was shown to contain much coarse granular matter, with some opaque granular cylinders, which might have been obstructed blood-vessels.

Many of the arteries at the base of the brain were obstructed by fibrinous coagula, chiefly on the right side. The termination of the right internal carotid was obstructed by a plug, one and a-half inch long, slightly adherent to the artery, and many others were found, as in the posterior cerebral artery on the left side, generally about an inch long. Both the cerebral hemispheres were, however, of the natural consistency. (288.)

SUPPOSED SOFTENING OF THE BRAIN; HEMIPLEGIA (PARTIAL) ON THE RIGHT SIDE OF THE BODY, WITH FACIAL PARALYSIS ON THE LEFT SIDE.

Case 120.—Thomas C., aged 42, a wheel-wright, having been previously in good health, was, about a year before he was admitted into the hospital, affected with giddiness, pain in the forehead, and a certain degree of loss of power on the *right* side. About six weeks before admission he for the first time found great difficulty in articulating distinctly, and occasionally he suffered from incontinence of urine; but, after a while, this symptom left him. On admission, his aspect was delicate, and his manner somewhat imbecile; all the movements of his limbs were weakened, and he complained of intense pain over the forehead. There was also slight paralysis of the *left* side of the face—the tongue being protruded to the right side; articulation was thick and indistinct; the pupils were dilated, and the right one was larger than the left. The pulse was 96, and soft. The tongue was coated. He was ordered iodide of potassium, with nitrate of potash and compound decoction of aloes, and ordinary diet, and porter. On the day after admission rigors came on, followed by profuse sweating, but this did not recur. The headache diminished. The pupils became equal, though very sluggish, and strength was recovered. Twelve days after admission he was out of bed, much stronger, and pain in the head had ceased. Moreover, the facial paralysis had almost, if it had not quite, disappeared, and the pupils took on more of activity. The alvine evacuations, however, were still, at times, passed involuntarily. Later on, the articulation grew more distinct, but slight paralysis of the muscles of deglutition subsisted. His imbecility of manner remained the same, and the difficulty as regarded swallowing continued to be considerable, but his general health appeared to improve.

At this time he was, unfortunately, removed from the hospital, and nothing further was heard of him.

EXTENSIVE SOFTENING OF THE RIGHT CEREBRAL HEMISPHERE; DISEASE OF THE LINING MEMBRANE OF THE KIDNEYS AND BLADDER; PROSTATIC ABSCESS.

Case 121.—James B., aged 35, a shoemaker, was admitted December 2nd, 1857. It appeared that three years previously he had had a "fit," when he lost his senses and bit his tongue. On recovery his speech was affected, and the *right* side of his body paralysed, and so remained a few days. Ever since there had been numbness in that side. About one and a half year afterwards he experienced a sudden loss of power, with a tingling sensation in the *left* side whilst walking, and fell down. This feeling lasted only a few minutes. Three months before admission he had another (a third) attack, but did not lose his senses; experiencing tingling at the fingers of the *right* hand, which ran up the arm, and extended to the whole of the side of the body. He had never had rheumatic or scarlet fever, but at times had passed blood in the urine. He had often had pain in the *left* eyeball, and double vision.

* For the details of this case I have to thank Dr. Allbutt of Leeds.

When admitted the left eyelid was quite closed, and the left eyeball turned outwards, and immovable except outwardly and slightly upwards. The pupil was much dilated, but not influenced by light. As regards the right eye, the sight with it was said to be very "long," requiring objects to be placed far off, and its pupil was very inactive, but of natural size. Double vision often came on when both eyes were opened, at which time the sight was also very dim. He had no pain in the head, and the memory was unaffected, but he complained of deafness in the left ear; the senses of taste and smell were entire. He complained much of pricking sensations on picking up anything with the fingers of the right hand; of frequent jumping of the legs, so that he could then not walk or lie down; and the whole of the right side felt weak. There was decided weakness of the whole right side, but he could walk with the aid of a stick. The tongue was protruded in a straight line, and was furred; bowels confined. The urine was acid, and contained a slight amount of albumen. The heart's sounds were feeble and distinct, but no valvular bruit existed. The lungs appeared in all respects natural. Later on the urine would pass away involuntarily; at other times it was voided with great difficulty, and much pain over the pubic region was complained of. Blood and mucus globules appeared in the urine. He was treated by counter-irritation to the back, and the use of the iodide of potassium. The power of holding the water varied much; pain in the head came on, and also in the loins and back. Rigors set in at the beginning of January, with pains in the penis and left renal region, and was followed by semi-coma. The evacuations passed were involuntary, and he sank and died January 10th.

Post-mortem Examination—Abdomen.—The kidneys were natural as to their substance, but their pelves and lining of the ureter and bladder were very inflamed and coated by recent fibrinous deposit, and the prostate contained a small abscess. *Cranium.*—The pia-mater was in places opaque. The brain generally was wet, and contained many vascular puncta. The posterior and outer part of the *left* cerebral hemisphere was in a very softened condition, and more vascular than other parts. The ventricles were large and full of fluid, and many gritty particles were found beneath the lining of the right ventricle, but few beneath that of the other ventricle. The vessels at the base of the brain were rather atheromatous. Other organs were natural. (10.)

SOFTENING OF FORNIX AND WHITE CENTRAL PARTS OF BRAIN; CARIES OF THE SPHENOID BONE; CHRONIC ABSCESS OF THIGH; COMA BEFORE DEATH.

Case 122.—Jane S., æt. 27, was admitted March 27th, 1863, in a very emaciated state. She had always had delicate health, but three years previously had a chronic abscess of the thigh, and the opening there made had never healed. About twelve days after admission she had a rigor, and immediately became unconscious, talking incoherently and incessantly for some hours, when she ceased to speak, but continued to move mouth and lips. She remained unconscious until death, which occurred March 30th.

Post-mortem Examination—Thigh.—The sinuous cavity was found amongst the muscles of the thigh connected with the opening above alluded to. The joints were healthy. *Thorax and Abdomen.*—The kidneys were much diseased. Other organs natural. *Cranium.*—The greater part of the body of the sphenoid was found to be carious, forming an abscess, at the upper wall of which was the pituitary body greatly enlarged. The surface of the brain was rather flattened, and the brain generally rather vascular. The fornix and neighbouring white central parts were softened.* (85.)

SOFTENING OF THE CENTRAL WHITE PARTS AND CONGESTION OF THE BRAIN; EFFUSION INTO THE VENTRICLES; CARIES OF THE SPINE.

Case 123.—Andrew Wright, æt. 3, was admitted September 3rd, 1845, having been ill three weeks, with loss of appetite and restlessness. He had had slight convulsions of the limbs, and twitchings of the muscles of the face; he had been very drowsy and thirsty, and often starting and at times screaming; his bowels had been much confined. On admission his pupils were very dilated, and acting imperfectly; he was sensible, and complained of much pain in the head; he was very drowsy, often rolling the head on the pillow; the thumbs were drawn into the palms; and twitchings of the face existed. In spite of treatment he became worse; the pupils became fixed, the breathing laborious; coma came on before death, which occurred September 10th.

Post-mortem Examination—Cranium.—The large veins at the upper part of the brain were much gorged; the pia-mater injected and the convolutions dry; the ventricles contained a large amount of clear fluid, and the fornix, posterior part of corpus-callosum and walls of the posterior and inferior horns of the lateral ventricles were softened and cream-like; a very slight amount of transparent lymph existed under the arachnoid membrane at the floor of the third ventricle. *Thorax and Abdomen.*—The lungs were slightly congested, and the left one contained a few patches like extravasation of blood; other organs natural. The body of the second dorsal vertebra was carious, and had an abscess connected with its anterior surface. (220.)

* For preparation of diseased sphenoid bone, see St. George's Hospital Catalogue, Series, ii., No. 40, A.

ON THE

USE OF ERGOT OF RYE AND PHOSPHORUS IN CERTAIN HEAD AFFECTIONS SIMULATING BRAIN SOFTENING.

By H. R. HADDEN, M.D., F.R.C.S., Clonakilty.

THERE are few practitioners who have not met amongst their intellectual patients cases such as that which I am about to describe, and who will not acknowledge that they are anxious and intractable. The present remarks are thrown out in the hope that those who read them may be led, not only to test their soundness, but to publish the results; for it is not likely that a sufficient number of such cases would fall to one man's lot to form such a basis for deductions as would entitle them to any very general reception.

You are called to a patient, or he enters your study; his gait is unsteady and uncertain, not unfrequently he appears near-sighted, but on closer examination you find that the lids are partly closed, rather to compensate for dilated pupils, the result of an amaurotic condition of perhaps long standing; there is a restlessness about his manner, he shifts uneasily on his seat, his hands are scarcely a moment in the same position, his legs are crossed and re-crossed unceasingly, especially as he describes his case, which he does after an evident effort to collect himself for the task; but once begun he does it rather rapidly, till suddenly he is at a loss for a word, or memory fails; he becomes greatly agitated, rubs his forehead and seems rather vexed with himself; in vain you tell him it is of no consequence and ask him to proceed; he must remember it, and if he can't he'll tell you he will presently, *and so he will*, for, suddenly, when at some other part of his case he stops and gives you the missing link. He has been very intellectual, and instead of curbing a free horse he has spurred him; either he has been a follower of the good old maxim—"It is more blessed to give than to receive," and has worked hard intellectually and otherwise for the sake of others; or he has been selfishly ambitious and worked but to hoard up the results, which, like the miser with his coins, he arranges, re-arranges, and worships, all alone (this latter will I think be found the most intractable case). Some years ago, perhaps either from constant reading or some other cause, his sight began to fail, by-and-bye he is at a loss for a word and can't express himself as freely as usual, dates and names or some such things are hard to be remembered at the right time, yet he can call to mind with

surprising minuteness the details of some little occurrence years ago; now he comes down to breakfast without his necktie or collar, he goes out without his hat—in fact he is subject to fits of absence of mind, and his friends get uneasy. It is all put down to stomachic derangement and sympathetic disturbance of the brain; he is dosed with Gregory's powder or some antibilious pills and bitters; some little temporary relief is obtained, a symptom is relieved for a little, but the real cause remains unmolested. At last there is some little unsteadiness of his gait, paralysis at once suggests itself to some intelligent friend, and a medical man is consulted; at once the over-worked brain is pointed out as the "fons et origo mali," but what is the matter with it? Threatened softening. A mild mercurial course is recommended; just because it is a brain affection; or the derivative treatment is tried; purgatives, acting on the lower bowel, are given freely and continuously; a blister is opened on the back of the neck and kept running; mustard foot-baths are recommended, all stimulants are interdicted, and total cessation from work enjoined. I am only describing what I have more than once done myself, but all to no purpose; no permanent advantage is gained, the mind becomes weaker, the gait more unsteady, and lesions (functional at least) of the chylo-poetic and genito-urinary systems are more frequent, till at last the dreaded ramollissement with its melancholy train of symptoms ensues; but, is this unavoidable? or at least is the foregoing treatment, and the pathological principles on which it is based, such as will be most likely to delay the progress of the disease, if not to interrupt it? I think not. Let us now strive to unravel the pathology; and here I must speak with caution, for I have no post-mortem appearances to support me, nor is it likely I will, for in this country place, unfortunately, amongst the middle and lower classes to open a patient's head after death would be to put your own into very considerable danger of similar treatment. However, as I do not want to bring forward anything new on this point, it does not matter so much; all will agree that the result of the constant overwork was a proportionately constant congestion of the cerebral capillary circulation, which if relieved by judicious intervals of rest would have done little or no harm, but from being so constantly dilated the walls of the little vessels lose their elasticity, till at last, when the rest comes they are unable to regain ther normal calibre, or *to do their part in the propulsion of the blood*, from which, be it remembered, the organ they supply is nourished; hence there is functional disturbance from mal-nutrition, merging slowly and fitfully but surely into organic disease. There is evidence enough of the disintegration of brain tissue in the phosphatic condition of the urine and elsewhere, *but the nourishing fluid is moving too slowly and sluggishly to bring sufficient nourishment to repair the waste.* Why? Because the capillaries are dilated and inelastic, and the very organ which is at fault is believed by many to play at least a very important part in endowing them with contractibility. Can this be remedied or relieved, and how? Will mercurial action do it? Scarcely, for stimulated absorption is not indicated. Will induced diversion of blood to and congestion of the capillaries of the rectum and elsewhere? Scarcely either, as although it may relieve those of the brain from tension in some degree, thus giving them a chance of contracting, *it will not stimulate them to do so, or minister one whit more nutriment to the organs which preside over this function*, although if the case be so recent that the contractibility of the capillaries is but slightly impaired, and its sources intact, the cause of the congestion being removed it may effect a cure; but the condition I have attempted to describe has gone beyond this.

To the experiments of Brown-Sequard on the influence of ergot of rye, belladonna, &c., on the capillary circulation of the cerebro-spinal system through its action on the sympathetic, I mainly owe, under Divine guidance, the treatment which the reading of them in The Medical Press and Circular suggested to my mind, and which I put into practice shortly after in the first of the cases I am about to narrate, and which was based on the belief that ergot of rye caused the cerebro-spinal capillaries to contract.

This presumed power of ergot of rye I conceived would be a valuable aid in the treatment of the affection under consideration, and the result in the following case, and others which I may by-and-bye bring forward, I think go far to prove that it was:—

Early in 1864 I was called to see a clergyman of the Established Church, who held a high character for mental endowments, hard work, and usefulness. His age was fifty-six. He had been eight years ailing. The first departure from health was impaired vision, for which he was with The Hofrath in Germany. He believed he received much benefit, and certainly brought home a most favourable impression of his treatment. He returned in the year 1861, and twelve months after he first noticed the commencement of the train of symptoms I have tried to describe. Suffice it to say that he went through all the stages above described, and had from time to time all the symptoms, with others besides, and moreover underwent most of the treatment. When I saw him he had a train of symptoms which (if this occasional interruption were not taken into account) would certainly warrant one in believing that there was decided and hopeless brain softening. Indeed this had been diagnosed, and no wonder, for he could not walk alone out of doors, would make the most egregious mistakes in his toilet, and trembled and jerked all over as he sat striving to talk to you, at a loss for every second word—in fact, mentally and physically in a state which threatened shortly to give place to the paralysis, torpor, and somnolency, if not idiocy of the advanced stage of the disease; indeed he and his mother, for he was unmarried, had just returned from a neighbouring town to await these symptoms; but on inquiry I learned that there were almost perfectly lucid intervals, during which mind and body seemed nearly in health. This encouraged me, for I argued that if hopeless disintegration of nervous tissue had taken place these intervals could not occur. Capillary congestion of the cerebro-spinal system offered me a satisfactory solution, especially as I found that the attacks were always preceded by excited cardiac action and engorgement of the frontal and temporal veins. So I determined to make use of the information I had just gleaned from Brown-Sequard's experiments concerning the action of ergot just referred to. The following was the treatment I suggested, and which was carried out with a firmness and minute attention which I have never seen equalled:—

To have milk or cocoa with wholemeal bread and butter, and a little meat at breakfast; a glass of claret and a biscuit between it and an early dinner of roast or boiled meat, with vegetables sparingly, and two glasses more of claret; a light evening meal of either very weak tea, milk, or cocoa, and bread and butter; no supper.

His brain to be kept as much at rest as possible, taking care to keep him in complete ignorance of all parochial matters.

A perpetual blister which had been open for years over the vertebra prominens, to be kept gently discharging, all medicine except the following to be scrupulously discontinued:—

R. Ergotinæ grana duodecim.
Pulv. aloës cum canella.
Antim. sulphuret. precip. aa gr. xxiv.

Fiat massa. divide in pilulas viginti-quatuor; sumat unam ter in die.

R. Calcis hypophosphitis, ℥ij.
Acidi phosphor. dil. ℥iv.
Syrupi aurantii, ℥i.

Aquæ font. ad. ℥xij. misce sumat. drachmas quatuor ter in die cum pil. sing.

The antimonial was intended to control the cardiac excitement, the aloetic to stimulate the sluggish bowel, and the phosphatics to feed the enfeebled brain, while the ergotine exercised its hoped-for specific action on the capillaries. I should say that at this time his urine glistened with triple phosphates, the bulb of the urinometer being even to the naked eye thickly studded with them, while the field of the

microscope was crowded with beautifully formed crystals; he was also occasionally tinged with jaundice.

I will not delay to go through the necessarily slow progress of the case. Suffice it to say that at the end of three or four months he could and constantly did walk a mile or more together, once, twice, or three times a day, besides moving about at home with comfort; his gait was steady, he was seldom at a loss for a word, his memory was excellent, and his manner calm and composed. By degrees the aloetic was decreased, as it was less needed, while from time to time an occasional flag was met by an increase of the phosphates. Matters went on so, with occasional interruptions, till he reached a state of mental and physical health I never hoped for; he now began to enter very much into his parochial work, and by degrees so much so, that he knew everything pleasant and unpleasant which happened, and transacted a great deal of business both by writing and otherwise—too much indeed, as the sequel proves; and now came a train of symptoms and a course of conduct on my part, which I think was mistaken, and which I can only excuse by the fact of my having been in very ill-health myself.

He was suddenly seized one day, during the early part of which, and for some days previously, he had done much brain work, with an attack which the note sent for me stated was extremely like apoplexy. I saw him a few hours after; he was confused and altogether upset, but his pulse was quicker than usual; there was heat of skin and thirst, his tongue was furred, and he had a rigor some hours before; he complained of difficulty of swallowing, but on examining the throat no cause could be seen; after forty-eight hours it was plain that an abscess of very large size was forming in the left and anterior walls of the pharynx; it increased, causing great discomfort, and very serious constitutional disturbance, till there was a very considerable bulging of that side of the neck; but, owing to the depth of the matter and the intervening muscles, no fluctuation could be perceived externally. On the fifth day the finger when passed well down over the root of the tongue could detect a rounded fluctuating prominence to the left of and on a level with the root of the epiglottis. As matters were assuming a very serious aspect I determined to endeavour to make an opening at this spot, having first made his friends aware of the possibility of the matter rushing from the opening into the trachea, and suffocating him. I rolled paper round the blade of a sharp pointed curved bistoury to within about half an inch of its point, laid it flat on the palmar surface of my right index finger, and while I drew forward the tongue well with my left hand, passed it down till it reached the soft rounded prominence before alluded to, and then by the movements of the remainder of my hand succeeded in making an incision at least half an inch long, and so deep that I could bury the top of my finger in it, yet no matter came; I made the incision yet deeper, and then penetrated further by the use of my sharpened nail, but all to no purpose, when I desisted, rather discouraged, but determined to make an opening from without after he had recovered a little, but before half an hour thick fœtid pus began to ooze from the incision, and before an hour had elapsed fully a pint had been brought up, to his entire relief, and mine also; the quantity of matter gradually decreased, and all healed up. The very serious brain disturbance which occurred at the commencement of this attack, and which was, I think, due to the circulatory excitement of the inflammation which resulted in the abscess, only partially subsided, for the relief of which I gave him James's powder, in fair doses; in continuing this treatment and losing sight of the ergot and phosphates I was, I now think, mistaken. Somehow or other I seemed to have lost confidence in it, and for a considerable period, now following, I combated the cerebral disturbance with the James's powder, turpentine enemata, sinapisms, &c., &c.; a train of digestive symptoms now arose, which I proceeded to treat with alterative aperients—pepsine, stomachics, &c., &c. Once or twice that I gave mercurials, they were evidently injurious, although I only used three grains of blue pill, with seven of compound rhubarb. I also tried very small quantities of brandy well diluted after dinner to aid a weak digestion, with excessive flatulence, but it did mischief, too—the one depressing, the other exciting unduly the feeble brain. My attention had now, unfortunately, got diverted from the origin of the disease to its symptoms, and although I reverted occasionally to the ergot and phosphates, it was only fitfully to give it up again on every (I now think) unfounded charge of disagreement. Matters went on thus—the mind becoming more enfeebled, and the functions of the various organs more impaired; one after another the following symptoms arose and repeated themselves—viz., jaundice, constipation, retention of urine (evidently from loss of nervous presidency over the bladder), hiccup, the most severe I ever saw or heard (lasting continuously for days, loud enough to be heard across the street, and violent enough to convulse his whole body); and last of all, the most unprovoked, and, to him, fearfully distressing sexual excitement, with incessant erections. All these were, as they arose, treated and relieved for the time by their appropriate remedies, but the ergot and phosphates had, by this time, fallen into entire disuse, till, some weeks since, I was called to find him in a state infinitely worse than he had ever been—idiotic, knowing no one, shuffling and tossing about in his bed, muttering all the while to himself, every moment wanting to make water, but when the vessel was brought and the penis caught to direct the stream into it, the mere touch excited the whole sexual system into a frenzy, and back he plunged to discharge both urine and fæces in his bed, with bursts of flatulence. He was, I thought, a wreck, and I was nonplused. However, my health having been restored by a trip to France, giving me a few weeks' rest, and my confidence in the ergot, &c., more than restored by my having tested it severely in several cases (one a most remarkable one, the patient having been a sufferer for nearly twenty-five years, and having undergone every conceivable treatment at the hands of the first men in the kingdom), I determined to revert with increased energy to my original treatment. His poor mother asked me if he could be removed to an asylum, or some such place, where he could have skilled nurses, and where she would be allowed to be constantly with him; but I said, "He cannot be removed now; the case is gloomy, very gloomy; but he may recover consciousness." Having stopped all depressing and aperient treatment, enemata, &c., I ordered the following:—

R. Ergotinæ.
Pulv. aloes c canella.
Antimonii sulph. prec. ana. gr. xxij.
in pil xxiv. Sumat unam tertiis horis.

R. Calcis hypophosphitis pxv.
Aqua aurantii ℥i.
ft. Haustus cum pilulo singulo sumend.

To have concentrated meat broths and claret liberally.

Next day consciousness was greatly restored, but easily lost, and all the other symptoms modified. Dr. Hadden, of Skibbereen, saw him with me, fell in completely with my original diagnosis, and advised the addition of one-eighth of a grain of alcoholic extract of nux vomica to each pill, which has proved of signal service in giving tone to the intestines and the muscular system. It is now some weeks since I saw him. (I should have said that after the first day the medicines were given only three times a day.) The accounts have been progressively improving, stating that his mental faculties have quite regained their balance again, and are not easily disturbed, but that he was still very weak. Ere yesterday his mother writes:—"Thanks to our gracious Lord, my dear son is going on favourably. He is stronger on his feet, and this day walked a while in the street without Mr. ——'s arm. He passes a good deal of water during the night; it comes freely. During the day he has not nearly so many calls." And on enclosing the note to my uncle, he says:—"It is pleasant to find that he is doing so well, and the improvement which immediately followed the return to your former treatment shows that there can be no doubt of the accuracy of your diagnosis, and the propriety of your persevering steadily with it." I have

already spun this paper to so much beyond my original intention that I will not now refer to any other case. At some future time I hope, if the Lord will, to report the further history of this case, and give the details of others; meantime I would solicit the aid of my professional coworkers in sifting the matter, and if found worthy, placing it on the firm footing of experience. If the lamentable uncertainty of the science of medicine is ever to be dissipated it must be by "a long pull, a strong pull, and a pull altogether."

In conclusion, I would say that, for all I know, this treatment may have been conceived and carried out by some one else, but I am not aware of it, and it is not within my reach to find out. I lay no claim to originality for its own sake, and only seek to advance the cause of truth.

A SUCCINCT HISTORY OF VACCINATION,

FROM THE YEAR 1796 TO THE YEAR 1866.

By W. H. SANDHAM, M.R.C.S., Cork.

Many kings, emperors, and princes, lords, dukes, and earls, patriots and poets, lay and clerical, military, scientific, and literary celebrities have had statues and testimonials erected to perpetuate their memories; many of whom, when we trace back their history, should have been denounced as tyrants and heartless enemies of common humanity, who, to gain a miserable distinction, sacrificed every principle of honour, and placed their heels on the necks of friends, since proved true as steel; but there have been grand exceptions. The Medical Profession of Ireland, and all the world over to a man, must feel individually honoured by the latest, hardest-earned, and best deserved tribute to the genius and perseverance in the cause of humanity of the illustrious Jenner—namely, the passing of the Compulsory Vaccination Act for Ireland by Great Britain's Queen, Lords and Commons.

When Dr. Jenner commenced his observations and experiments the annual mortality from small-pox was—at Naples 16,000, 20,000 at Paris, and 30,000 in England. Variolous or small-pox inoculation was first introduced into England in 1721-4.

"Cow-pock and its anti-variolous powers have been known for ages in the greatest part of Holstein, especially in the eastern parts; but inoculation from one human subject to another was unknown until Jenner's publication."—(*Vide* "Report of the Medical Faculty of Kiel to the German Chancery of Copenhagen on Cow-pock in the Duchies of Schleswig and Holstein.")

Dr. Jenner made his first experiment of human vaccination on the 14th May, 1796. Dr. John Redmond Coxe first introduced it into America.—(*Vide* "Practical Observations, dedicated to Jenner in 1802.")

In 1806 the King and Queen's College of Physicians and the Royal College of Surgeons of Ireland were requested, by direction of his Majesty George III., to transmit to the Royal College of Physicians in London their observations and opinions upon the state of vaccine inoculation in Ireland. They did report, and strongly urged the promotion of vaccination.

The practice of vaccine inoculation was first introduced into Dublin early in 1801, the year it was determined there should be but one Imperial Parliament for the British islands.

The Cow-pock Institution, North Cope-street, Dublin, was established in 1804, under the patronage of the Earl of Hardwicke, and it is from this period we must date its general introduction to Ireland. This institution in 1804 vaccinated 578; in 1805, 1124; and in 1806, 1356 patients. The original "Vaccine Pock Institution," Golden-square, London, was established, and did good work, about the same time as the Dublin Institute. The Committee of the Royal College of Surgeons, Ireland, report that from the 25th Nov., 1800, to the 25th Nov., 1806, 11,005 were vaccinated at the Dispensary for Infant Poor, 2831 at the Cow-pock Institute, making a total of 13,836, exclusive of those at hospitals and other places where no register was kept.

In 1806 a vaccine club held their meetings at the British Coffee-house, Charing-cross—William Devaynes, Esq., M.P., was chairman—where the post hoc and the propter hoc were considered, and they advocated vaccination.

The Cow-pock Institution was removed from North Cope-street to 56, Sackville-street in 1804, under the patronage of—

PHYSICIANS.	SURGEONS.
Joseph Clarke.	George Stewart.
James Cleghorn	Ralph S. Obre.
Thomas Evory.	Solomon Richards.

At this institution, from 1804 to 1807, 5122 were vaccinated.

The Committee of the Carlow Infirmary issued an address, pressing on every one to promote vaccination.

CEYLON.

In August, 1802, to June, 1806, 47,523, and in June of the latter year, 2490 were vaccinated.

INDIA.

From September, 1802, to May, 1805, 429,821 were vaccinated in the Presidency of Madras, of whom 2816 were subsequently inoculated with small-pox, *which they all resisted.* From September, 1805, to 31st August, 1806, 178,074 were vaccinated.

SCOTLAND.

The Vaccine Institution, Scotland, reports having, from 1801 to 1806, vaccinated 7140.

JAMAICA.

In 1807, 900 were vaccinated at Jamaica.

NEW ENGLAND.

In 1805, Dr. Spalding, of Portsmouth, New England, writes:—"The blessings of the cow-pock spread far and wide through this country."

THE DANISH DOMINIONS

Adopted it, and in the Islands of Ferroe, Iceland, and even Greenland, in 1802, 6849, and in 1805, 23,185 were vaccinated.—(*Vide Med. and Phys. Journal*, 1807.)

SILESIA.

In 1804, 24,319 persons were vaccinated; but, on account of the war in Germany, 17,316 were vaccinated in 1805 in Silesia, all of whom escaped the small-pox which broke out early in spring, and continued for the remainder of the year, and premiums were granted to persons who distinguished themselves in the practice of vaccination.—(*Vide Edin. Med. and Surg. Jour.*, No. 9.)

Dr. Willan properly says, "None should be inoculators who have not particularly attended to vaccination."

But Spain and Russia outdid all in their philanthropic efforts at this time to spread the practice of vaccination throughout the world.

You may read in the *Med. and Phys. Journal*, vol. 17, page 247, as follows:—"On the 31st Nov., 1803, an expedition sailed from Corunna, by order of the Spanish Court, under the direction of Dr. Francis Xavier Belamis, Surgeon Extraordinary to the King, and several members of the Faculty, conveying with them twenty-two children, selected for the preservation of the vaccine fluid, by successive inoculations during the voyage, which was undertaken for the sole purpose of establishing vaccine inoculation in all the possessions of the Crown of Spain situated beyond the seas, and in those of several other nations. They touched at the Canary Isles, Porto Rico, and at the Caraccas, when the expedition divided into two branches, one sailing to South America, under the sub-director Don Francis Salvani, the other, with the director Belamis, steered for the Havannah and thence to Yucatan. There a sub-division took place, the parties taking different routes, that they might propagate vaccination as widely as possible, and having made

very extensive circuits, they met at Mexico, whence they proceeded to the Philippine Islands, carrying with them twenty-six children from New Spain. Having propagated the specific in the islands, Belamis established the practice at Maçao and Canton; after which he embarked for Lisbon, where he arrived on the 15th of August. He stopped at St. Helena and prevailed on *the English to adopt a practice which they had undervalued for eight years.*

The other part of the expedition traversed South America; here were vaccinated 50,000 persons without one unfavourable result. They met at Santa Fe, and at the end of March, 1805, continued their journey in separate tracts over the remaining districts of the vice-royalty of Lima and on to Guayaquil. A correspondent has informed Mr. King of London of an expedition being set on foot by the Court of Petersburgh, which had, when the account of its progress arrived, propagated vaccination through the vast territories of Siberia and Tartary, and was about to enter the northern boundary of China.

The most remarkable outbreak of small-pox of modern times occurred at Cork in 1855--56, when I (after having advocated house-to-house vaccination in a letter addressed to the *Cork Constitution*), was appointed visiting vaccinator for the city, and Archdeacon Kyle exerted himself beyond all praise to raise funds for benevolent individuals to carry it into effect. My report of that epidemic and the success attending vaccination was published in 1856, and the *Lancet* of the 16th of May, 1857, commented on it :—

"Some subjects there are which periodically turn up apparently for the sole purpose of affording the credulous and weak-minded opportunities for the display of their feebleness and self-sufficiency. Discredit of vaccination, and of its beneficial effects, is one of these subjects. It would not enhance our opinion of human discernment to recount the absurd and impossible effects that have been gravely discussed as attributable to its use, or to repeat the assertions of the gobemouches, that the benefits of vaccination are illusive, and its protective influence a delusion. For this reason, and on account of its intrinsic interest, we cite one of the most notable illustrations which has lately happened of the incalculable value of the great discovery of Jenner :

"In the beginning of 1856, there broke out in the city of Cork an epidemic of small-pox. It raged throughout the city. The Archdeacon of Cork devoted his energies with noble philanthropy and wise forethought to collecting a fund for the appointment of a public vaccinator to visit from house to house. Dr. Sandham accepted the appointment, and fulfilled his task with admirable zeal. On the 8th of March, when he began his labours, the disease was raging in every lane and ally. In five weeks he vaccinated 2474 persons, and in six weeks after the commencement of his mission he traversed the whole city and found no case that needed vaccination. The energetic course stayed the plague which, during the previous two months, had gradually gained ground in spite of every effort, and attained a frightful intensity. From the report of Dr. Sandham we learn, that of those admitted into hospital one-third of the non-vaccinated died, of cases in the workhouse one-third also died, and the medical officers state that notwithstanding the exposure of all classes to the contagion, it never spread amongst any but the non-vaccinated, nor were any of the nurses or attendants affected."

Since my report and the remarks of the *Lancet*, every man in the French army was vaccinated or re-vaccinated, and without one unpleasant result. But, as in Jenner's day so in mine, anti-vaccinators are to be found who tell the public—without any proof—that if they get their lovely babes vaccinated they will have horns before they die, or something much worse ; so at this time up jumps Mr. John Gibbs, M.P., St. Leonard's-on-Sea, and addresses a letter to the *Brighton Examiner* attacking me and the Archdeacon of Cork in most unparliamentary language. He says :—"A Dr. Sandham, assisted by an Archdeacon, who had better have been trying to save souls, commenced an energetic course of vaccination, and in six weeks 'stayed the plague.' This is certainly a marvellous statement ; but plain common-sense people who do not respect superstition —(nor facts)—even when clothed with the authority of 'science,' so-called, because it teaches not to know—will ask what it really all means." Again, Mr. Gibbs writes, "How absurd to expect protection by poking an animal poison on the point of an instrument into the arm !" In fine, Mr. Gibbs argues that every disease to which flesh is heir to is caused by vaccination.

Several controversial letters on the subject from both of us appeared in the *Brighton Examiner* of 1857. I was attacked by Mr. Gibbs, his friend Mr. T. W. Stowell, M.B., Church-street, Brighton, and a gentleman signing himself "Anti-vaccinator," who I suspect to be a Cork solicitor, who may be an authority on legal matters, or be clever at making out a bill of costs, but certainly not an authority to guide the public on the question of vaccination.

However, after seventy years' perseverance by vaccinators, notwithstanding the opposition and ridicule heaped upon them from time to time, we have, as suggested by my report, and pressed for by the *Lancet*, and the many authorities quoted in this history, now in full force "a Compulsory Vaccination Act for Ireland."

For the benefit of future vaccinators, I will wind up by quoting Dr. Willan's admirable description of perfect vaccination :—

"Vaccination is accounted perfect when recent lymph has been carefully inserted beneath the cuticle, in a person free from any contagious disease, and has produced a semi-transparent pearl-coloured vesicle, which, after the ninth day, is surrounded by a red areola, and afterwards terminating in a hard, dark-coloured scab. The form and structure of the vesicle is peculiar. Its base is circular, somewhat oval, with a diameter of about four lines on the tenth day. Till the end of the eighth day, its upper surface is uneven, being considerably more elevated at the margin than about the centre, and sometimes indented by one or two concentric furrows ; but on the ninth or tenth day the surface becomes plane ; and in a very few instances the central part is perfect. The margin is turgid, firm, shining, and round, so as often to extend a little beyond the line of the base. The vesicle consists internally of numerous little cells, filled with clear lymph, and communicating with each other. The areola, which is formed round the vesicle, is of an intense red colour. Its diameter differs in different persons from a quarter of an inch to two inches, and it is usually attended with a considerable tumour and hardness of the adjoining cellular membrane. On the eleventh and twelfth day, as the areola declines, the surface of the vesicle becomes brown in the centre, and less clear at the margin. The cuticle then begins to separate, and the fluid in the cells gradually concretes into a hard rounded scab of a reddish-brown colour. This scab becomes at length black, contracted, and dry, but it is not detached till after the twentieth day from the inoculation. It leaves a permanent circular cicatrix, about five lines in diameter, and a little depressed, the surface being marked with very minute pits or indentations, denoting the number of cells of which the vesicle had been composed." "Cowpock is described by Mr. King as being on the third day like a fleabite, on the eighth a crystal, on the tenth a pearl, and on the twelfth a rose without a thorn."

The clear transparent lymph should be taken from the unbroken, uninjured vesicle of a healthy child, *at the latest* on the eighth day after vaccination, but, in warm summer weather, may be best on the seventh day. If the lymph is allowed to be so old as to look opaque, purulent, or bloody, or even taken at the proper time mixed with the blood that escapes from treating the vesicle too roughly, it ought not to be used, much less depended upon, and it is my opinion, once the vesicle is developed and runs its course, as in the description of perfect vaccination quoted above, that this once secures the individual for life—as far as vaccination can do—without any future necessity for vaccination. I am entirely against vaccinating with the scab formed, even in the early stages, by the escape of the clear lymph.

Cork, 22nd Dec., 1866.

Hospital Reports.

SPECIAL REPORT
ON THE
TREATMENT OF CHOLERA BY VENOUS INJECTIONS.

LONDON HOSPITAL.

MR. LITTLE'S CASES.

(Continued from page 573, vol. ii., 1866.)

INJECTION OF SALINES; GREAT IMPROVEMENT; RECOVERY.

Case 21 *(No.* 16 *of the Table).*—A. B., aged 6, a small strumous-looking child, was brought to the hospital last September, in the morning. He had been seized with purging and vomiting of a rice-water character in the night; had had no previous diarrhœa, and had passed urine when he went to bed. On admission the choleraic expression was well marked; his lips and the skin round his eyes were blue; his pulse was perceptible, though weak and 130; respiration 40; temperature in the axilla 96·5. He was not yet in extreme collapse. During the forenoon he vomited and was purged frequently; he complained of great thirst, and drank cold and iced fluids freely.

He got gradually into extreme collapse, and at four P.M. was considered bad enough for saline injection—in fact those of the hospital staff who saw him considered his case hopeless. He was pulseless at the wrist, carotid feeble, the temperature in the axilla had fallen to 95, whilst in the rectum it was 101. He had 48 respirations a minute, was voiceless, livid, and gasping.

The median basilic was opened at the right elbow, and when fifteen ounces of the usual saline alcoholic fluid had been introduced by gravity, the improvement was so great that the operation was discontinued. The improvement was contemporaneous with the injection, the blueness first diminished, the breathing lessened in frequency and increased in depth, the pulse returned, and at the conclusion of the operation was good at only 100, respiration 40; voice natural. He had no rigor, but felt cold, although, as usual at this stage of treatment by venous injection, the temperature in the axilla was rising, and the internal temperature falling. Half an hour after the injection they were respectively 97 and 100, and the child gradually passed into a warm perspiration, took some beef-tea, which he kept down, and had no thirst.

Eight P.M. No vomiting, but has passed three rice-water stools since the operation. He is not so well as after the injection; his respiration is more frequent, but his pulse is still fair, and he is not livid; therefore he was not re-injected.

He took several spoonfuls of brandy and egg mixture, and beef-tea during the night, and slept pretty well.

In the morning, to our great surprise, he was sitting up in bed playing, quite convalescent, and clamouring for breakfast. Since the last report the bowels have acted three times; the last motion was coloured. He passed urine in the evening, and was kept on spoon diet for two days, then wine and chop were ordered, and he rapidly regained his strength.

In this case, as in others, the vomiting entirely ceased after the injection, and it is remarkable that there were not the slightest symptoms of reactionary fever, which at this period of the epidemic was very fatal to children. This case made a great impression on those who watched it, and converted one or two who were sceptical as to the benefits of the treatment, and who had previously stated it to be an utterly hopeless case. The speedy convalescence was partly due to the fact that the most urgent symptoms were not of long duration, as he was brought early to the hospital, and no large doses of powerful drugs had been previously administered.

Case 22 *(No.* 18 *of the Table).*—This man was injected, as the table shows, four times, each time with benefit, so much so as to make him talkative and expect to get well, but each time the improvement was only temporary. His stools were tinged with blood (rose-coloured) before the injection, so that although the warm fluid was a powerful stimulant, yet some fatal change had most likely taken place in the blood and a breaking up of the corpuscles.

PARIS HOSPITALS.

Several of our contemporaries have recently announced, as though it were a new fact, that this mode of treatment has recently been tried in Paris. Our résumé of the history of venous injections showed distinctly enough that the French had tried them at an early date, and since then there have not been wanting men in each epidemic as ready to avail themselves of this as of any other mode of combating disease.

In the epidemic of 1849 M. Briquet injected saline fluids into the veins of some cholera patients, and witnessed the temporary revival that usually follows. He was not, however, fortunate enough to have a permanent recovery.

Last year the method was again put in practice, not only in France, but we believe at St. Petersburgh, and some other places, but the success has not been very encouraging.

In justice, however, to our confrères across the Channel, we may offer a summary of some of their cases:—

In the Hôpital Lariboisière, four patients under the care of M. Héraud were unsuccessfully injected last August. Of these, in one case only two ounces of fluid were injected, and the instrument employed was very imperfect. The patient lived three days after the injection.

In another case only five ounces were injected, and the operation was extended over about half an hour. Nevertheless, a considerable rally took place, moisture was again noticed in the eyes, and the patient spoke rationally, while the temperature in the axilla rose from 96° to 100°. A relapse shortly took place, and in two hours the patient died. The very small quantities injected in each of these cases would seem to remove them to altogether a different class from many we have related. In the remaining two much more fluid was employed. In one of them twenty-four ounces were injected into the veins of a patient who seemed to be *in articulo mortis.* An immediate rally followed; the eyelids recovered their motor power; the temperature evidently rose, but was not noted by the thermometer; he recovered the power of speech, and actually made his confession to the priest. In an hour, however, relapse came on, and he sank into a drowsy state and died.

In the last case reported at the Lariboisière about forty ounces of fluid were injected, the operation occupying about an hour. Moisture returned to the eyes, as in the other case, the colour returned to the lips, perspiration broke out over the face and chest, the temperature of the body rose, the surface was even described as *hot.* In every respect the patient seemed to be much better, and the mental activity and power of speech were so far restored that the man declined to sign a document presented to him for that purpose. In spite, however, of this great change a relapse soon took place, and he only lived about four hours longer.

These cases would seem to show that the amendment was in proportion to the quantity of fluid thrown into the circulation, and the last, especially, almost makes us regret that re-injection was not attempted.

To these we may add two cases communicated to the Academy of Medicine by M. Colson. In each of these a similar temporary benefit was noticed, but in both the symptoms returned, and the patients died. The liquid employed by M. Colson was as follows:—

R. Aq. distill. ℥xl.
Sodæ mur. ℥iiss.
Sodæ lactatis, ℥iss.
Sodæ phos. ℥ss.

He injected it at a temperature of 107 deg. F., by means of an ordinary hydrocele syringe, into the median basilic vein. It is obvious that in none of the above cases has the method been carried out with the same perseverance and perfection of means as in those reported at the London Hospital.

To these cases we may add the particulars of the successful case recently brought before the Academy of Science by M. Lorain, and to which our contemporaries have drawn so much attention. It occurred in the St. Antoine Hospital, to which the patient was admitted on September 29, at 8 A.M., in a state of such hopeless collapse that none of the staff expected him to rally. The cramps were severe ; he was pulseless and voiceless, with total suppression of urine. Temperature—32 degs. Centigrade in the mouth ; 34 degs. C. in the axilla ; and 37 degs. C. in the rectum. In the evening 400 grammes of water, at 40 degs. Cent., were injected into the veins. A stronger impulse of the heart immediately succeeded ; the respiration became less oppressed, and the thermometer in the mouth, which had fallen during the day till it was only 26·8, just before the operation rose to 30. The patient then spoke. Two hours and a half afterwards he was sleeping calmly, and the surface was warm and bedewed with perspiration. Three hours later the thermometer in the axilla was 34·8 C. The patient was now awake, restless, and he vomited twice. The next morning he sat up in a chair, but no urine was yet passed, and the pulse remained imperceptible. Temperature of mouth 35·9, of axilla 34·6, of rectum 37·8 Cent. He continued to improve, and the third day after injection passed upwards of two pints of urine. The temperature was now 36·8 in the mouth, 36 in the axilla, and 37·2 Cent. in the rectum.

Having now reported in full a large number of cases in London, and briefly referred to many others at home and abroad, we shall, in our next article, conclude this report with a few of the deductions to be drawn from the experiences we have recorded.

ST. VINCENT'S HOSPITAL.

ABSTRACT OF A CLINICAL LECTURE UPON A CASE OF FRACTURE OF THE PELVIS.

By FRANCIS B. QUINLAN, M.D.,T.C.D.,

MEDICAL ADVISER TO THE HOSPITAL, AND PROFESSOR OF MATERIA MEDICA TO THE CATHOLIC UNIVERSITY.

After some preliminary observations upon the anatomy of the bones of the pelvis, their articulations and bonds of union, and the relations of the soft parts surrounding and contained within that cavity, Dr. Quinlan said—"The specimens upon the table were taken from the body of the patient A. B., a female, aged 35, No. 3, St. Mary's ward, who upon the 18th of November was knocked down upon the footpath and run over by a runaway horse yoked to a heavy country cart, which, however, was empty at the time of the accident. As she lay partly upon the right side, the wheel passed over the left anterior superior spinous process and down across the lower part of the abdomen. I saw her immediately after the accident, and perceiving by her collapsed appearance that she had met with some grave internal injury, had her removed to St. Vincent's Hospital. Her first symptoms were those of great weakness, for which stimulants were freely administered ; and when she had rallied enough to allow of examination, it was found that there was a lacerated wound about four inches long extending across the hypogastric region, and through the mons veneris ; this wound was of a semi-lunar shape, with the convexity downwards, and laid bare the tendon of the external oblique ; but, as might be expected from its character, the hæmorrhage was not considerable. A large ecchymosis marked the track of the wheel over the left side, and a corresponding one on the right side showed how the right great trochanter had been violently pressed against the footpath. Examining further I found that the left anterior superior spinous process was quite moveable and yielded an indistinct crepitus. The right foot was everted, but there was no difference of length, or crepitus on rotating the femur. These symptoms and the circumstances of the accident caused me to apprehend the occurrence of fracture of the left side of the pelvis, with probably a corresponding counter-fracture of the right. Later in the evening she was seen in consultation by Dr. O'Ferrall, who kindly visited her daily during the rest of her illness. He at once pronounced the existence of the fracture and counter-fracture to which I have alluded; and at his suggestion I introduced a catheter and drew off eight ounces of natural coloured urine without any trace of blood. There was no desire to pass urine ; on the contrary, for about forty-eight hours there was that inactivity of the bladder so often observed in severe injuries of the pelvis and its neighbourhood. These circumstances caused us to form a rather confident opinion that the bladder was not injured, as it would have very likely been had it been full at the time of the accident. It is not quite so easy to decide this point as might at first sight appear ; and above all the mere presence or absence of blood in the urine is not to be relied upon. The quietude of the bladder, the quantity of urine, and in a secondary degree the absence of blood were the reassuring circumstances in this case. Had the bladder been ruptured the rent would in all probability have been upon the posterior surface of the top of the fundus.

"The patient continued extremely weak, and as there was now some irritability of the stomach, wine mixed with a little brandy was administered during the night ; she was kept in a comfortable position, and the abdomen was well stuped and poulticed. Upon the following morning reaction was well established, and in view of the probable occurrence of peritoneal symptoms, calomel and opium in very small doses were commenced. The stimulants, according as required, along with beef-tea and other suitable nourishment, were continued. The right thigh and iliac region were much swelled and beginning to become œdematous.

"Rather circumscribed peritonitis, commencing in the right iliac fossa, set in and was combated by leeching and stuping ; the swelling and œdema increased, and ended in the formation of deep-seated matter in the iliac right fossa and thigh, but not situated in such a manner as to permit of direct surgical interference. These symptoms were treated, from day to day, as they arose ; and the patient's strength was carefully maintained by nourishment and the judicious use of stimulants. About the eighth day she began to improve, and continued to do so for some days. About the eleventh or twelfth, that form of pelvic cellulitis, so often observed in these injuries, set in with its usual accompaniments of quick weak pulse, brown typhoid tongue, and general depression of the vital power. The stimulants were now freely employed ; and, upon the suggestion of Dr. O'Ferrall, champagne and also strong tea were had recourse to. She gradually, however, became weaker and got drowsy, and finally died of asthenia upon the morning of the eighteenth day after the accident.

"The post-mortem examination was carefully made about twenty-four hours after death by Mr. W. H. O'Leary, Assistant-Surgeon to the hospital. Upon opening the abdomen we found a good deal of severe localized peritonitis in the right iliac fossa, in which also there was a large fluctuating swelling underneath the iliac fascia, to which the cæcum was adherent ; the cæcum itself was inflamed and of a dark colour, but there was no communication between its cavity and the interior of the swelling. Laying open the latter, we found a great deposit of purulent matter, which we traced upwards along the psoas muscle as high as the fourth lumber vertebra, and downwards along the sheath of vessels nearly half-way down the thigh, and inwards to a fracture of the os pubis, which will be presently described. In this cavity, in addition to pus, there was some aplastic lymph, and a good deal of ecchymosed blood. There was also a quantity of ecchymosed blood underneath the peritoneum along the right ilio-peritoneal line, above and inside the right acetabuulm, showing that the cart-wheel after passing over the front of the left ala of the ilium had come down upon

this part. We next examined the intestines, particularly the rectum, but found no injury. The uterus and vagina were also safe. Turning to the bladder—to test the validiy of our belief that it was not injured—we filled it with water with a catheter and syringe, and removing the catheter, and stopping the meatus with the finger, pressed upon the fundus and found the bladder and urethra perfectly water-tight. Turning now from the soft parts to the pelvic bones, we found an amount of injury greater even than we had expected. In the left os innominatum there was a fracture commencing beneath the anterior inferior spinous process, and extending to a point about an inch behind the anterior superior spinous process, breaking the piece off, and another fracture commencing about an inch in front of the posterior superior spinous process, and running into the left synchondrosis. In the right os innominatum, where the counter-fracture had occurred, there was a longitudinal fracture, commencing at the upper and outer part of the obturator foramen, extending backwards through the acetabulum and the ala of the ilium to the crest, at a point about two inches in front of the posterior superior spinous process. From the centre of this fracture there was another extending through the ala of the ilium and the anterior superior spinous process. Turning to the acetabulum we observed the great longitudinal fracture, already described, passing through this cavity in a line slightly above its notch. From this there branched off a fracture of the shell of the acetabulum, running across the whole cavity. The cartilage of the head of the femur opposite these two fractures was eroded, and the cartilage surrounding the erosions was very vascular. Turning now to the right pubal ramus we found two fractures—one of the thin portion of the descending ramus of the pubis, a quarter of an inch above the point of fœtal union; and the other of the ascending ramus of the ischium where it joins the tuber. Lastly, there was a disclocation of the symphysis pubis, the right pubis being dislocated forward and slightly upwards, the inter-articular cartilage remaining attached to the left pubis, and having still connected with it a fragment of the right pubic bone. The sacrum and coccyx were uninjured. The dislocation of the symphysis pubis was not observed during life—a circumstance which was probably partly owing to the œdema, and partly because, having once ascertained the existence of the fracture and counter-fracture, we did not make any further examination into the details, which, however interesting in a mere diagnostic point of view, could have done no good to the patient, and would have certainly hastened the supervention of the pelvic cellulitis, which was the immediate cause of death.

"Reviewing all the circumstances, we must perceive the irrecoverable nature of this case from its very outset. Looking to the extensive osseous injuries, we cannot but be surprised that none of the pelvic viscera were injured. This is partly owing to the fact that no sharp point of bone was directed towards the pelvic cavity, and partly because these viscera were guarded more or less by the osseous structures. The only one directly exposed to the wheel was the bladder, and, had it been full, it would most probably have been ruptured.

"The extensive counter-fracture in the right os innominatum appears to me to have been produced by the acetabulum being violently driven against the head of the right femur, which, through the medium of the right trochanter resting upon the ground, acted as an upright wedge, and "stove in" the right side of the pelvis; a belief which is strengthened by the ecchymosis along the right ilio-pectoral line. An instance of this is related by Sir Astley Cooper in his "Surgical Essays," and another by Mr. Earle, in which the lines of fracture diverging from the acetabulum followed those of fœtal union. Nothing of this latter kind occurred in the present case, probably on account of the age of the patient. Owing to the complete eversion of the right foot, fracture of the neck of the femur might have been suspected; the absence, however, of crepitus or shortening, and the perfect semicircular rotation of the right trochanter easily decided this point in the negative. This eversion was simply owing to temporary paralysis of the rotator muscles of the right thigh, produced by the injury, and is frequently observed in severe bruises of the hip, unattended by fracture of the neck of the femur.

"Mr. Travers has recorded a case of fracture running into the acetabulum in which there was at first no shortening of the thigh-bone, but in which gradual shortening subsequently took place—a circumstance which he attributed to secondary changes in the head of the femur by absorption of the articular cartilage and eburnation. In the present instance the vascularity and erosion of the cartilage of the head of the right femur, opposite the fractures, might lead us to suppose that this process had commenced.

"The pathological examination of the abscess appears to justify the opinion that, during life, it could not have been evacuated. It could only have been reached through the thigh; and, considering the nature of the communication between the femoral and iliac deposits of pus, I doubt whether such a proceeding would have been effectual as regards the deposit in the iliac fossa, which was the principal one.

"Lastly, when we look at the circular arched shape of the articulated pelvis, we perceive what force must be required to crush it in—in fact, the accident is generally caused by the sufferer being run over, crushed between two railway buffers, or some other such great violence. When, however, the pelvis is crushed in, we see how naturally a serious fracture of one side is accompanied by a counter-fracture of the other. This arched shape gives to the pelvis a great power of resisting violence; but when the violence is of such intensity as to overcome the resisting power of the arch, the resulting lesions are of course proportionately serious."

Reviews.

ON DISEASE OF THE RIGHT SIDE OF THE HEART.

By T. M. Daldy, M.D. London: Bell and Daldy.

The author of this small but thoughtful essay has lighted upon a subject hitherto little regarded, and consequently had to draw principally upon his own clinical experience. He believes that the right heart, and more especially the auricle, is liable to a deterioration of its muscular structure, which gives rise to numerous well-defined disordered states of health, and which is essentially different from fatty degeneration. Dr. Daldy has for many years studied the subject, and here lays before the profession the conclusions to which he has arrived, in so compact a form that the busy practitioner may easily find time to read his little work. We have perused every page more than once, and if not quite prepared to endorse all the author's ideas, we can honestly advise all our readers to follow our example.

Having said thus much, it will perhaps be but just to follow Dr. Daldy through the several propositions he lays down.

First of all, he traces to feebleness of the right heart, and especially its auricle, many cases of dyspnœa, and even of angina pectoris, and he would attribute to this condition the powerful effect that certain emotions sometimes exercise on the circulation. The diagnostic signs of this condition he considers to be dullness on percussion to the right of the junction of the ziphoid cartilage with the lower third of the sternum, and propagation of the heart sounds towards the right clavicle. These signs, which should of course coincide with derangement of some part of the circulation, Dr. Daldy thinks are due to an abnormal distension of the right auricle, and this distension is caused by a deteriorated state of its muscular structure, which deprives it of the power of emptying it prior to the fresh supply of blood being on the point of entering. The pathological condition of the auricle is that its muscular structure is reduced to a state "something like elastic tissue (not fatty degeneration)," and here we encounter what is, perhaps, the weak point of the argument, for the author acknowledges that it is almost impossible to demonstrate post-mortem the condition referred to. It is, indeed, fair to remark that a dilatable rather than a dilated auricle would sufficiently answer the purpose of the reasoning offered us; and it is easy enough to imagine that abnormal distension may occur under unusual pressure. This, however, would be a less grave, because less persistent, state than the "habitually distended right auricle," to which Dr. Daldy more than once refers. It has certainly seemed to us that the temporary lesion might be more frequent than the

permanent, if, as Dr. Daldy asserts, the deterioration of the structure is not fatty degeneration, and, indeed, cannot yet be exactly defined. This would be very hopeful in a prognostic view.

Dr. Daldy has met with instances of this disease which lead him to believe that it is hereditary, and even to be traced through two or three generations.

We now pass to the results to which this condition gives rise.

Cases of congestive headache, vertigo, and even softening of the brain, and mania, are traced by our author to the impediment offered by a distended auricle to the return of the blood through the superior cava.

The symptoms so often called determination of blood to the head would, in this view, assume an altogether different aspect, being produced, not by an actual supply of larger amount, but by the impediment to the return presented by the auricle being unable to receive the contents of the cava, on account of its not having discharged itself of its previous supply. In another class of cases, the effects of a stimulant would be equally beneficial in certain cases of syncope, whether there were actual deficient supply of blood to the brain, or, as Dr. Daldy says, impeded return.

We have no desire to extract all the valuable remarks respecting such difficult subjects as softening of the brain and mania, and shall therefore only state that, to an engorgement produced in the same manner Dr. Daldy thinks may be traced many cases of organic cerebral mischief, and that his statements are well worthy of attentive study.

In respect to treatment, allusion is made to the light atmosphere of great elevations enabling the patient to enjoy exercise. Other hygienic and dietetic counsels are offered, and then the "little as possible ruffled mind" is described as the "grand factor of comfort to persons labouring under deteriorated heart-structure;" and further allusion is made to the "mental erosion, resulting from life's scramble either for existence or distinction." We can most thoroughly corroborate this from considerable experience, and should be glad to see the subject more extensively treated. The wear and tear of modern life has, indeed, been frequently described as a cause of disease; but we doubt if even yet carping care, violent emotion, or that wretched state of worry in which too many of our patients pass too large a share of their time, is not much oftener than is believed the origin of numerous cases commonly described as heart disease. Certain we are that either will aggravate disease of the heart where it already exists.

Of drugs, our author does not name many. To diminish the quantity of blood sent to the right side of the heart, he purges with German Pullna water. He also recommends the habitual use of Vichy water to neutralise excess of acid, determine to the kidneys, &c.

To increase muscular tone he relies upon iron.

The use of stimulants is cautiously treated. Dr. Daldy thinks a certain amount of wine beneficial, but believes it should be taken only in small quantities at a time.

"I have," he writes, "arrived at the conclusion that wine is almost an article of necessity to these patients; but that if they require three glasses during the day it should be taken at three separate periods. The condition is comparable to that of a drooping plant, which requires a small quantity of water frequently, but if you give it too much, at any one time, you seriously impair its vitality."

REPORT TO THE CORPORATION OF DUBLIN ON THE OUTBREAK OF CHOLERA, 1866. By E. D. Mapother, M.D., Medical Officer of Health. Pp. 63. Dublin. 1867.

In this report, from which we can find space for only a few extracts, Dr. Mapother avows himself a contagionist, but explains two other conditions which must concur in order to spread cholera. The first case he traces from an infected street in Liverpool to a room in Dublin, where the importer and three relatives died. In the ten days following this, six other persons with the disease upon them arrived in Dublin, and the contagion then spread so extensively that in a large city the difficulties of tracing it became insurmountable. He explains the greater mildness of the disease, when the infection is through the medium of air, by the greater dilution which the germs undergo. He quotes numerous examples of the communicability by water, and gives the following instances relating to the vicinity of this city:—

"In Swords, a little town of some 1400 people, 65 cases of cholera occurred in seven weeks. The water supply was from an unprotected well, subject to great defilement, as I witnessed. There was the greatest difficulty in isolating the patients or getting them to go to the hospital, but as brandy was given out there was no difficulty in ascertaining when and where the cases arose. The sanitary state of the place has been greatly bettered, owing to the representations of Dr. Davys.

"In the village of Crumlin, out of the 165 inhabitants, 46 were seized with cholera or choleraic diarrhœa. A single and most superficial pump is the sole water supply, and its produce is stinking and often muddy, as Dr. R. P. White informs me.

"Kingstown suffered far more than Dublin in proportion to the population, and at least one of the promoting circumstances is a wretched supply of water, exclusively by wells. After two cases of cholera, one of which was fatal, had occurred in the house of a friend of mine, he poured a quantity of carbolic acid into the sewer, and found that the water of the adjoining well tasted of that substance for many weeks after. It is almost certain that the sewage had in the same way percolated before the appearance of the cholera."

Of other media, he says:—

"The clothes of some cholera patients, who had been in one of the hospitals last August, were sent to be washed by a woman in Chamber-street, where the disease had not been previously, and in three days she was seized with cholera, which proved fatal to her and to a man residing in the same house, and spread extensively in that street, which is built along the Poddle."

"No death by cholera has occurred since the 28th December, and it appears to be for the present extinguished. During the 23 weeks it lasted, it destroyed 863 residents of our city, and 52 other persons brought in with the disease died in Dublin hospitals; if their deaths were registered in their respective localities, the mortality of some suburban districts would be relatively much higher than that of Dublin."

The cases of cholera, and of diarrhœa for 12 weeks before the outbreak, and during it as well as the diarrhœa, temperature and rainfall of the corresponding weeks in 1865 and 1864 are arranged in a tabular form. In the 1849 epidemic, out of a smaller population, we lost 1664; and in the most fatal month, June, 477 persons. In October, 1866, 268 persons died, and that month afforded the highest mortality. The late has been the most fatal of the epidemics in many Continental cities. "In my report for August I stated that the three following conditions should concur for the development of the cholera:—First, communication with those already sick; second, the unhealthiness of the body, which overcrowded rooms, bad food, intemperance, impure air, or uncleanliness produces; the third condition is purely local, consisting in a porous undrained soil, in which excremental matter putrifies. I will offer evidence of the truth of this statement, as your conviction will mainly influence the steps which are advisable in order to prevent the renewal of the pestilence in spring.

"First—Communication with the sick was clearly traced in the earliest cases, but in a constantly intermingling population, and with such variety of media of infection as water, air, and clothes, it soon became impossible, as is also the case with fever, scarlatina, and other catching maladies. Exclusion by quarantine being impracticable, as persons coming from an infected place may import the disease although they themselves were not perceptibly attacked, our safety lies in disinfection.

"Second—The well-fed, well-lodged, and cleanly, and, consequently, healthy people, almost altogether escaped; there is, therefore, great need for the exercise of benevolence, and in raising the healthiness of the poor the affluent protect themselves. It may be fairly supposed that our remaining population are to some degree insusceptible of the disease.

"Third—Dampness and Foulness of Soil.—Suspecting that the malaria thus emitted conduced to cholera, I traced on a map of the city the long-forgotten streams and pools which are delineated on the plans of Dublin, by Speed, in 1610, and Rocque in 1756, and also marked the houses where all the deaths by the disease had occurred. It appears that cholera has almost exclusively fixed on houses built on these ill-drained sites, or placed close to the canals and other stagnant waters."

Some very interesting results are given. The space on which the house in City-quay, where the first case occurred, was fifty years ago a dock. The Poddle, Camac, Bradogue, and Tongue rivers, and the ditch surrounding the city walls, have been the great lines of the disease; in fact, almost every case can be shown to have been in houses built over such unsuspected sources of danger.

"The remedies are, the perfection of our drainage and the passing of a building act (such as English cities enjoy) to prevent speculators erecting houses on any site or in any way which costs least. In but four of the hundreds of our infected towns did the disease survive the cold of January, 1850, and they may have been re-infected. This fact, and the records of other cities in former epidemics, make me hopeful of immunity this year. However, besides the preventative steps alluded to, and continued vigilance on the part of the sanitary inspectors, I would advise, while the disease is at least dormant, that the refuse receptacles of all houses visited by cholera should be disinfected with carbolic acid and copperas, and that as many as possible of the house drains and main sewers in the city should be flushed simultaneously at stated periods."

The instructions for disinfection and isolation of patients are detailed fully, but do not seem to differ from those elsewhere employed, except in the provision of refuges for the families of those attacked, and a hot-air disinfecting chamber, which, however, from various causes, was not ready till some days after the last case had occurred. It will be used for purifying the fomites of other contagious diseases.

In a report addressed to non-professional persons, he does not, of course, enter into the proximate cause or symptomatology of the disease, but he leans to the belief that the cholera poison is organised, the more so, as it escapes the charcoal filter unaltered, whereas if it were merely a chemical compound, some change would be induced by oxidation. He appeals to the discovery of pus cells in the air of the eye ward at Prague, which had spread purulent ophthalmia, to support the idea that the cholera germ, even if dry, may regain vitality when applied to the alimentary mucous surface. In our columns, some months ago, Dr. Mapother asserted that, in cholera, the sympathetic system was excited probably in a reflex way by the irritation of the mucous surface. As the sympathetic system is the great controlling power over contraction of involuntary muscular fibre, especially the vaso-motor part of it, a profound impression upon it would induce contraction of all the capillaries and necessary cessation of all cell changes and the liberation of heat. It is impossible to believe that the drain of fluid (which in many cases in the late epidemic has been very slight), and consequent thickness of the blood would rapidly lead to the collapsed condition indicated by the shrivelling of the extremities and the stoppage of those functions dependent on the circulation, secretion, absorption, and the production of heat. The production of urine and bile are notably by cell action, and ceases therefore in cholera, but the drain from the skin and intestinal surface may be regarded as exhalations, especially if it be true that the epithelium of the latter is cast off early in the disease.

He noticed also that the pupil was dilated in the great majority of cases of cholera, and that the fact indicated increased action of the sympathetic, as it likewise does when worms in the intestines afford the exciting cause.

ON DISEASES OF THE VEINS, HÆMORRHOIDAL TUMOURS, AND OTHER AFFECTIONS OF THE RECTUM. Entirely re-written. By Henry Lee, F.R.C.S., Surgeon to St. George's Hospital. Second edition. Pp. 190. London: Churchill and Sons. 1866.

Mr. Henry Lee has been so long before the profession as an original writer and an accomplished surgeon, that little more is necessary than to announce the second edition of the present work in order to insure for it a cordial welcome. But as some of our medical brethren, and especially some of the younger among them, may be unacquainted with Mr. Lee's contributions to surgery, we may take the opportunity of mentioning that the work is divided into two parts, the first consisting of a Treatise on Diseases of the Veins, and the second of an Essay on Diseases of the Rectum. The first Essay on the Treatment of Hæmorrhoidal Tumours was published in 1848, and the first edition of the "Diseases of the Veins" was published in 1850, having been the subject of the Jacksonian Prize Essay for the previous year. Although at first sight the different subjects which occupy the volume do not appear to be necessarily connected with one another, yet the diseases of veins form an appropriate point of departure for the consideration of hæmorrhoidal tumours, and thence to other affections of the rectum. The plan of treating piles with nitric acid, originating with Mr. Houston, but advocated and adopted by Mr. Lee, has been widely appreciated since the publication of Mr. Lee's treatise in 1848. We feel that it would be superfluous in us to do more than to announce the appearance of the present edition, and cordially to commend it to professional notice.

The Medical Press and Circular.

"SALUS POPULI SUPREMA LEX."

WEDNESDAY, JANUARY 9, 1867.

SPECIAL HOSPITALS.

The multiplication of what are called Special Hospitals is a subject which is now engaging much attention on the part both of the profession and of the public. The former are concerned, from the fact that many of our brethren are either connected with such institutions, or are anxious to become so, and the latter are beginning to take an interest in the question because it is pressed upon them by many of the Medical Officers of the General Hospitals. The practical point now to be decided appears to be whether physicians and surgeons who accept appointments at the Special Hospitals shall be allowed to continue their connection with General Hospitals, or whether the governing bodies of the latter institutions shall not be empowered to insist that the Medical Officers who held both appointments shall resign one or other of the posts which they hold.

As to the broad question existing between General and Special Hospitals, there is, as is usual in matters of controversy, much to be said on both sides. On the one hand it may be urged that the General Hospitals are so arranged that they are capable of receiving and of treating all the diseases to which human nature is liable, and that the Medical Officers who are appointed to take charge of the patients may be considered to have given sufficient evidence of their respectability and of their professional attainments, and that the fact of their election to such offices may be received by the public as a guarantee of their competency. It is true there may have been a time when hospital medical appointments were made rather on the ground of personal and class interests than of distinguished ability, but such a time has long passed away, and it may fairly be asserted that the present Governors of our General Hospitals are actuated only by disinterested motives in the choice of the Medical Officers, and that they conscientiously endeavour to secure the best occupants for the vacant places. We entirely repudiate the idea that deserving candidates are ever rejected from impure motives, although it may be true that the best man is not always successful.

But, on the other hand, there are obviously many classes of disease which cannot well be treated in the General Hospitals, either from the deficient arrangements of the buildings or from the peculiarities of the diseases themselves. Thus, for instance, lunatics cannot be conveniently received in General Hospitals in consequence of the chronic form which the malady often assumes, and from the injurious influence which might be exercised by such cases over

the rest of the patients, and it would be inexpedient and unsafe to admit small-pox and other contagious diseases into the general wards, or to mingle children with adults. Hence there can be very little question that insanity ought to be treated in Special Hospitals and Asylums; that small-pox and similar affections should be treated separately from cases of ordinary disease, and that lying-in women should be received in distinct wards; and very plausible arguments may be adduced in favour of treating children apart from adults, and of appropriating particular buildings for the treatment of diseases of the eye. Then, again, there can be no doubt that certain forms of disease are properly confided to the treatment of Medical Officers possessing special attainments, and that, as in the instance of the eye, peculiar dexterity is attained by surgeons devoting their abilities to the treatment of the diseases or accidents befalling that organ.

But while the Profession fully admits that what is callled specialism in the cases we have just adduced is not only excusable but desirable in the interests of medical and surgical science, it is evident that the minute subdivision of disease into a multitude of distinct branches must tend to destroy or to impair that system of studying disease as a whole, which ought to be the prime object of every true disciple of the healing art. The heart and lungs, for instance, are so intimately connected in their anatomical and physiological relations that the treatment of the diseases of the one must necessarily involve, in very many cases, that of the other; and it would be as unphilosophical to institute separate establishments for the treatment of cardiac and pulmonary complaints as it would be to establish hospitals respectively for the treatment of diseases of the duodenum, the jejunum, and the ileum.

Again, it is necessary to examine every case of the establishment of a Special Hospital on its own merits. Many of these institutions are really merely private concerns, got up for personal objects, and without being subject to any of these controlling influences which, in a great measure, secure in public charities the respectability of the Medical Officers, and it is not unusual for persons so self-appointed to claim for themselves a more abundant measure of skill in treating special diseases than falls to the lot of their brethren. These are some of the abuses of the Special Hospital system, and we are not sorry that the subject has been ventilated, although we strongly suspect that in some instances personal feelings have done something to dictate the opinions which have been expressed, and that the old adage, "two of a trade can never agree," may, even in the professional contest now raging, find a not inappropriate exemplification.

YELLOW FEVER.

Although it would appear that yellow fever does not find in this country a congenial soil for its development and propagation, it has been raging with great severity of late in some of the West India islands, and the last accounts relate a fearful epidemic of the disease among our troops in Demerara. Several ships coming from infected islands or places have reached our shores, and some have had on board patients suffering from the disease; but hitherto, so far as we are aware, the infection has not been communicated to any of the inhabitants of our islands. It would appear, indeed, that there exist in the West Indies and on the adjacent mainland climatic or local influences favourable to the origin and spread of yellow fever, but which are happily absent in our own country. Thus we find that while the malady periodically breaks out in the countries to which we refer, it is unknown as an indigenous scourge in Great Britain, and even when accidentally introduced, it fails to find a soil congenial to its extension. Our home Government is probably by this time convinced of the inutility of quarantine regulations in the case of yellow fever, and it is unlikely that the passengers of a ship coming from the West Indies will again be subjected to the hardships and inconvenience of lying for many days in the wintry season off the Isle of Wight, because some cases of the pestilence had occurred among the crew.

The accounts received from Demerara, however, are of a very painful description, and the more so because we find that in an article of the *Demerara Royal Gazette* blame is thrown upon the Garrison Medical Officer for not advising or consenting to the removal of the troops, among whom the disease prevailed, and to whom, as we understand, it was entirely confined. Whatever may have been the cause, the results have been most disastrous—the troops, it is said, having been more than decimated, and those who have been spared being described as in a most deplorable condition. The circumstance that the soldiers alone have suffered would seem to prove either that the locality where the garrison is situated is deficient in its sanitary arrangements, or that the troops themselves have been rendered liable to the infection by some constitutional predisposition. Both these causes may probably have contributed to the deplorable result; but the information now eagerly sought for is that relating to the conduct of the military authorities in not at once removing the soldiers from the infected spot to a more healthy locality. From some letters in the newspapers, it would appear that the site of the garrison at Demerara is not unhealthy, and that the disease must be traced to other causes than mere insalubrity of locality; but on these and other points we shall probably soon

receive more definite intelligence than that which we at present possess, and the conduct of the authorities will be subjected to Government investigation.

THEORIES OF CHOLERA.

Now that the subsidence of the epidemic leaves time for reflection, we shall be able to direct attention to certain theories that have been advanced. That of Dr. Johnson has already been so ardently pushed that his opponents have as yet scarcely had fair play. We shall therefore be justified in placing before our readers the reply that has been penned by Dr. Chapman—one of the most able of those who disagree with Dr. Johnson.

Dr. Chapman's own ingenious theory will be duly noticed in the review which is in preparation of his work on cholera, from which we extract the following analysis of Dr. Johnson's views:—

This theory (of Dr. Parkes), after being considerably modified, has been adopted by Dr. George Johnson. He has taken from it an important element,* the presence of which was likely to increase the probability of its truth in the eyes of rigorous scientific thinkers, has added to it a proposition† for which there is no ground in either experience or analogy, and has introduced it to the world supported on assumptions which he proclaims as truths. With a confidence alien to the genuine scientific spirit, he insists, in the absence of evidence, on the perfect adequacy of his doctrine to account for every phenomenon of cholera, and to dictate the only rational method of treating the disease, in a series of arguments, plausible at first sight, and calculated to mislead all who do not think for themselves, but which, when weighed in the balance of scientific experience and accurate reasoning, are found to be wholly "wanting."

Referring to the symptoms of choleraic collapse, Dr. Johnson asks, "What is the pathological explanation of this remarkable train of symptoms?" and then replies, "The one great central fact is this, that *during the state of collapse, the passage of blood through the lungs, from the right to the left side of the heart, is, in a greater or less degree, impeded.*" He afterwards says, "I believe the true explanation of the arrest of the blood in the lungs to be this:—*The blood contains a poison whose irritant action upon the muscular tissue is shown by the painful cramps which it occasions; the blood thus poisoned excites contraction of the muscular walls of the minute pulmonary arteries, the effect of which is to diminish, and in fatal cases, entirely to arrest, the flow of blood through the lungs.*"

Within so short a compass as the two foregoing paragraphs, it would be difficult, in my opinion, to find elsewhere so many and such important assumptions destitute of proof. It would be quite as reasonable to say that the powerfully contracted and empty, or nearly empty, condition of all the systemic arteries, excepting the large branches, or the distended condition of the systemic veins, their radicles and main trunks included, is the one great central fact of collapse. What *is* the central fact?—is precisely the question which has long needed, and is still needing, an answer; and Dr. Johnson's assertion that the impediment, in a greater or less degree, to the passage of blood through the lungs from the right to the left side of the heart is that central fact, is wholly unproven.

Again, he says—"The blood contains a poison." This assertion, though made by most of the authoritative writers on cholera, and repeated by almost every one who helps to swell the literature of the subject, is unsupported by any evidence of a satisfactory character; while, on the other hand, a large array of facts may be advanced in support of the hypothesis that the blood of cholera patients is poisoned in no respect whatever.

Again, Dr. Johnson says, "the irritant action" of this hypothetical poison "upon the muscular tissue is shown by the painful cramps which it occasions." Can he offer a single proof of the truth of this statement? Until he has done so, I reply confidently in the negative. In those diseases in which there is unequivocal evidence of the presence of a poison in the blood—small-pox, scarlet fever, or measles, for example—the irritant action upon the muscular tissue is not shown by the painful cramps which it occasions, for it causes none. If, then, cramps do not occur in these signal instances of the presence of an organic poison, it is simply absurd to allege that the cramps of cholera are caused by a poison, the very existence of which remains to be proved. Moreover, cramps constantly occur in cases where there is the most unequivocal evidence that the blood is not poisoned. It has been indubitably proved that pure dynamic derangements of the blood supply of the nervous system, and especially of the spinal cord, are adequate causes of abnormal muscular contractions.

"The poisoned blood," Dr. Johnson says, "excites contraction of the muscular walls of the minute pulmonary arteries," but he tenders no proof whatsoever of this assertion, nor does he even supply reasons which render it seemingly probable. Having stated that the walls of the pulmonary arteries are muscular, and that under the influence of a stimulus they have the power of contracting upon their contents, he at once jumps to the conclusion that in cases of cholera they are irritated by a poison in the blood, and consequently, by contracting, impede the passage of blood through the lungs. He states that the injection of a concentrated solution of salt of soda, or a few grains of nitrate of silver, into the jugular vein, or the admission of air through a wounded vein in the neck or axilla, is speedily followed by death; and that beaten bullock's blood, mixed with air, requires nearly twice the pressure to drive it through the pulmonary vessels that suffices to drive unmixed blood through them. Having thus shown "that the movement of blood through the lungs may be quickly arrested by the addition of some foreign ingredient to the blood, and that this arrest is probably due to the power which the arteries possess to contract upon their contents,"* he implies that in doing so he has adduced a proof that in cases of cholera the contraction of the pulmonary arteries is due to the exciting influence of a poison in the blood. I submit that there is here no connection between the premises and conclusion; and that, until the missing link is supplied, the very foundation of Dr. Johnson's hypothesis must be held to be a mere assumption. If the hypothetical poison be, as alleged, an efficient cause of the contraction of the pulmonary arteries, and of the cramps of the voluntary muscles, how comes it that Dr. Johnson does not teach that the systemic arteries are contracted by the same agency? If the blood be poisoned, surely its poisonous influence must pervade the whole body, and pre-eminently, according to his own statement, the muscular structures, and therefore the muscular coats of the systemic arteries. In restricting the action of the assumed poison as he has done, he has, it seems to me, weakened his own case; for that the systemic arteries are in a state of intense spasmodic contraction is believed by at least some competent observers. He says himself—"I suppose that no physiologist at the present day would deny that spasm of the arteries is as real a fact as spasm of the muscles." It is, therefore, difficult to understand how, in presence of this fact, of his hypothetical blood poison, and its assumed irritation of muscular fibre, he does not extend the influence of this poison to the systemic arteries.

Having stated his doctrine in the manner now described, Dr. Johnson says:—"We can now understand the sudden coming on of collapse, and its sudden passing off. Robust men falling down 'as if they had drunk the concentrated poison of the upas tree,' and recovering again almost as rapidly as 'patients who are resuscitated after suspension of animation from submersion in water.'" But such "patients" have not absorbed a poison, and it is not difficult, therefore, to understand their rapid resuscitation. If, however, cholera collapse be induced by a blood poison sufficiently virulent to irritate, and thus to produce contraction of the pulmonary arteries in the manner he alleges, it may be easy to understand "the sudden coming on of collapse," but it is almost, if not quite, impossible to understand "its sudden passing off." In those cases of disease in which we know an organic poison is present, its sudden passing off has never been observed; and as such a fact is contrary to all experience, its possibility is discredited.† Moreover, it is precisely in those cases in which the alleged contraction of the pulmonary arteries is especially intense, or, in other words, in which the spasmodic phenomena are markedly predominant,

* Viz., the doctrine "that there is some impediment, or arrest of the circulation, in the capillary system generally."

† Viz., that the blood, which in cholera patients is alleged to be poisoned, "excites contractions of the muscular walls of the minute pulmonary arteries."

* The reason given for "this arrest" is more than questionable.

† It may be alleged that the rapid recoveries from the poisonous effects of ether, chloroform, and hydrocyanic acid countenance Dr. Johnsons's statement; but it must be recollected that these are not *organic* poisons.

and in which the eliminative processes, vomiting and purging—regarded by Dr. Johnson as Nature's method of getting rid of the poison—have been least active and continuous, that recoveries, when they do occur, are most rapid.

"The most interesting and conclusive evidence," says Dr. Johnson, "that arrest of blood in the lungs is the true key to the pathology of choleraic collapse, is to be found in the simple yet complete explanation which it affords of all the most striking chemical phenomena of the disease—the imperfect aeration of the blood, the fall of temperature, the dark and thick appearance of the blood, and the suppression of bile and urine." Now, this arrest of blood, considered as the central fact of collapse, is nothing more nor less than suffocation, or asphyxia; but, in asphyxia, the characteristic phenomena of choleraic collapse are never induced; the features are not shrunken, but tumid; and the body generally, though more or less livid, is in no respect shrunken, as it is in algide cholera. The differences, in fact, between the two states are numerous and essential. In asphyxia, the liver and kidneys are gorged with blood, but in choleraic collapse they are both anæmic. Without comparing the two conditions in detail, I will merely state a few conclusive facts. First, whereas in cholera "a mortal coldness" comes over the body with astonishing rapidity—sometimes in a few minutes—in asphyxia there is no such rapid diminution of heat—the long continuance of the animal temperature, even after the heart has ceased to beat, is a characteristic fact. Second, whereas in cholera cadaveric rigidity comes on with extreme rapidity, in asphyxia it continues absent "almost always for a much longer perid than from death under other circumstances, and from other proximate causes."* Third, whereas in choleraic collapse there is suppression of bile and urine, in asphyxia there is neither one nor the other. Thus it appears, that of the several phenomena stated by Dr. Johnson, in the passage last quoted, as being explained by his doctrine, only one—viz., the imperfect aeration of the blood—is really accounted for; and when this occurs in cases of pneumonia so severe as to cause the blood in the systemic arteries to become dark, no symptoms like to those characteristic of choleraic collapse are observable.

Dr. Johnson says—"Suppression of bile and urine during the stage of collapse is a necessary consequence of a limited supply of oxygen, which results from obstruction in the lungs." If so, why is there not a like suppression in asphyxia, and severe cases of pneumonia? If the blood in choleraic collapse contains a supply of oxygen so limited as to preclude the possibility of any oxydation whatever, in either the liver or the kidneys, and thus to arrest entirely the functions of those organs, how is it that there is nevertheless sufficient oxygen in the blood to enable the cerebral functions, which involve a considerable amount of oxydation, to continue without interruption? How is it that when collapse is most profound, and when death is approaching, there is still sufficient oxygen in the blood to permit of a recommencement of oxydation, resulting in a notable increase of animal heat, so that the temperature of parts of the body rises before death, and that of the whole body after death, the elevated temperature being prolonged for a considerable time?

Dr. Johnson accounts for the admitted fact, that in some cases of choleraic collapse "*the secretion of milk continues apparently undiminished*," by saying—"The chief constituents of milk, casein, sugar, oil, and water may be obtained from the blood without the addition of oxygen. The secretion of milk, therefore, coninues during the stage of collapse." What I have already said, concerning "the defective supply of oxygen" as the alleged cause of the suppression of bile and urine, renders Dr. Johnson's ingenious explanation of the continued secretion of milk extremely questionable, and will be probably considered as completely confuting it.

While the positive side of Dr. Johnson's theory is so demonstrably erroneous, the negative side is not less remarkable by the number of phenomena characteristic of cholera which it fails to explain. Of the prodromata of cholera—slight headache, slight deafness, singing in the ears, dizziness, faintness or syncope, and the copious discharge of pale urine—he renders no account, and makes not the least attempt to show how they are produced. His great discovery that vomiting and purging are "the salutary efforts of Nature, by which the morbid poison is eliminated," is not sufficient: if his doctrine be true, it should surely explain the "modus operandi" of these important processes. The fact of the contraction of the bladder to the size of a walnut he passes quite unheeded. The seemingly paradoxical fact, that while the systemic arteries are almost wholly emptied of blood during collapse, sweat is freely, and very often profusely, secreted, also passes unnoticed as well as unexplained. The remarkable calmness and clearness of the intellect during collapse—notwithstanding the suffusion of the brain with blood, the supposed poison of which is said to cause the pulmonary arteries to contract so vehemently as to impede or arrest the circulation, and thus to cause death—receive neither comment nor explanation. The rise of the temperature of the body immediately before death, and for some time afterwards, and the astonishing muscular contractions, often involving movements of the limbs, sometimes even of a seemingly co-ordinated character, after death, obtain no recognition whatever.

If it be admitted that a poison exists in the blood, and that it effects the contraction of the pulmonary arteries in the manner stated by Dr. Johnson, his hypothesis does not account for the contraction of the bronchial tubes and the consequent absence of air in the lungs, which is denoted by the extreme collapse observable in these organs. So extreme is this collapse, that, as stated by Dr. Parkes, "several observers have opened bodies under water, believing that air must have been generated in the pleural cavities; but this was found not to be the case, and the shrinking of the lungs must depend on some cause existent in itself." This very interesting and remarkable fact, wholly inexplicable, I apprehend, by Dr. Johnson's theory, is passed over by him in silence. Dr. Parkes feels the difficulty and expresses it.

There is yet another difficulty connected with the lungs: some time before death, usually two or three hours, there is often, as already stated, "some return of heat in the scalp and forehead, *over the region of the heart or whole chest*, and it may be also over the abdomen; the extremities are still icy-cold, and the cholera visage is unaltered." Now it is fairly presumable that when the supposed poison in the blood is on the point of destroying its victim, it must, according to Dr. Johnson's hypothesis, exert its maximum of poisonous energy on the muscular coat of the pulmonary arteries; and yet at this very time it appears that the poisonous blood often courses through the lungs again, and produces, in consequence, a considerable elevation of temperature. Dr. Johnson fails to explain this very curious and interesting fact, seemingly adverse to his doctrine.

The kidneys are in a very pre-eminent degree the organs by which poisonous elements in the blood are separated from it, and thus cast out from the body: if vomiting and purging be "the salutary and curative efforts of Nature" by which the cholera poison is elimintated, the fact that Nature does not avail herself of the chief eliminating organs—the kidneys—in order to effect a more rapid and complete expulsion of the poison from the system, is certainly very astonishing and inexplicable; but Dr. Johnson ignores this fact also, or, at least, makes no attempt to reconcile it with his doctrine of elimination.

Tried by the test of practice, Dr. Johnson's theory is found to be no less unsatisfactory than it has been proved to be by the evidence given above. He says: "I maintain that this pathology is a compass which will guide the intelligent practitioner over a 'sea of troubles' and perplexities in the treatment of cholera." Guided by this compass, Dr. Johnson has discovered that "the natural method of cure is eliminative," and that the best eliminative method consists in the administration of castor-oil. In section 13 of the next chapter will be found a considerable body of evidence, proving that the practice of giving purgatives to cholera patients is an extremely dangerous one, liable, in fact, to induce collapse and destroy life; and in the same section, the reasons of their dangerousness are explained. The experience and reasons there given are remarkably accordant with the conclusions expressed in the report on the results of different methods of treatment pursued in epidemic cholera, addressed to the President of the General Board of Health, by the Treatment Committee of the Medical Council of the Royal College of Physicians. The results of the several plans were tabulated, so as to show the *per centage* of deaths following each plan. That following the use of eliminants was the greatest of all, viz. 71·7; the per centage of deaths following the treatment by castor-oil was even greater than that which followed the use of eliminants in general; *it was* 77·6 *per cent.* In the report on the treatment of cholera drawn up for the Royal College of Physicinas by Dr. Gull, he says,—"The popular theory that the discharges are an effort of nature to throw off a *materies morbi* is not only unsupported

*Copland's "Dictionary of Practical Medicine." 1866. Art. Asphyxy.

by any known facts of the disease, but when applied to practice is found to increase the violence of the symptoms." "We have only to say," observes the *Lancet*, of June 2, 1866, "that there is a discrepancy between Dr. Johnson's experience, and that of the profession. His treatment was largely tried in 1854, and generally and strongly disapproved." Considering these decisive statements, the reader will scarcely be surprised by the following confession, published in 1866 by Dr. Johnson himself: "I have not the faintest hope or expectation that a specific remedy for such a disease as cholera will ever be discovered."*

Notes on Current Topics.

Casuals in Clerkenwell.—We have extracted from the *Times* the recent revelations respecting the manner in which casuals have been turned away from the Clerkenwell Workhouse. It is but fair to report that one of the guardians has ventured on a reply. In his letter this philanthropic gentleman asserts that "it is no great marvel that the porter should behave in a rude manner to him (Mr. While, who brought the matter to the notice of the public), and order him off the premises, and tell him he was drunk," and this because Mr. While knocked so loudly at the door. Never, we assert, was a more indecent apology put forward, and we only regret that Mr. Hopkins, the guardian who pens it, cannot be compelled to occupy, for at least one cold night, the position of the two unfortunate casuals whose rights were so justly taken up by Mr. While. But, lest we should be thought partial, we reprint below Mr. Hopkins' letter to the *Times*:—

Sir,—As reported by you in the *Times*, an inquiry was held by Mr. Corbett, the Poor-law Inspector, into the charges brought against the officials of the Clerkenwell Casual Wards. I, as one of the guardians, attended that inquiry, and I am bound to say that so far as the case then investigated is concerned, I consider our official did his duty in refusing to admit the two men whose cases were brought under the notice of you and the Poor-law Board. The evidence of the porter on oath, which was unshaken by the severe cross-examination of Mr. While, or the Inspector's utmost scrutiny, was that the two applicants were drunk. That evidence was corroborated on oath by Police-constable 158 G, an intelligent officer, who gave his evidence very fairly. Mr. While, on the other hand, swore they were sober, and called a witness to prove, as I understood, that he was sober. My impression, as an impartial witness anxious for justice, is that Mr. While was so excited that he was not a competent judge as to the condition of the two casuals. I gather this from the fact that the policeman swore that he heard a violent knocking when he was in Pear-tree-court, some 130 yards distant, and on his hastening to learn the cause, he found it was Mr. While demanding admission for these men at the casual ward, and the same policeman swore that such was his excitement that, "until he turned his bull's eye full upon his face, he thought he was drunk too," it is no great marvel that the porter should behave in a rude manner to him and order him off the premises and tell him he was drunk, when the noise could be heard so far off. I cannot resist the thought that Mr. While's sympathy for the two casuals was more than counterbalanced by his utter regardlessness of the slumbers of a large number of poor wayfarers who were sleeping in the wards.

Allow me to ask you, sir, and your readers, if Mr. While would not have acted in a fairer manner to the Clerkenwell Guardian Board, if, instead of rushing into print and writing to the Poor-law Board, he had made his complaint to us first, either personally or by letter, and then if we had taken no notice of his complaint, or instituted no inquiry into the matter, to have had recourse to the extreme measures he has? As it is, none of us were aware of either of the cases until we read them in the *Times*, and we are thus brought prominently before the public for the alleged infraction of laws which it is our hearty desire and anxious wish to have carried out.

In conclusion, allow me to say your reporter is altogether in error when he says that the guardians had resolved that no one should be admitted to the wards unless introduced by a guardian. The guardians, I beg to say, have nothing to do with the admissions; their instructions to the casual wards officials being to admit all wayfarers, homeless and destitute.—Yours obediently, John W. Hopkins, Guardian.

Royal Commission on Water Supply.—We are happy to find that the question of water supply is to receive further investigation. A Royal Commission has been appointed to inquire into the means of obtaining pure water for London, and the chief towns. Sincerely do we hope that inquiry may result in action. Too often a commission has only been a mode of respectably shelving a difficult question. Let us hope that in this instance the Government is in earnest. Nothing is of greater importance to the people than an abundant supply of pure water, and nothing ought to interfere with the inquiry, or prevent the decisions that may be arrived at being turned to account.

Proceedings of Societies.

MEETING OF THE HARVEIAN SOCIETY.

December 20, 1866.

President—Dr. TYLER SMITH.

CASE OF INHERITED SYPHILIS.

Dr. Drysdale showed a patient, a young woman, aged 19, with the usual characteristic marks, described by Mr. Hutchinson, of inherited specific disease. The girl had pegged teeth, remains of interstitial corneitis, and was quite deaf. She had been blind at the age of seven, and had been deaf since the age of twelve. Neither the father nor mother would admit that they had been infected. Dr. D. said that he had at that time four similar cases under observation, in all of whom the appearances of the teeth, &c., were associated with the history of inherited syphilis. He considered that Mr. Hutchinson had made very great addition to the knowledge of the causation of degenerative diseases by showing that what but a few years ago would have been looked upon merely as scrofula, was in reality a consequence of syphilitic poison in peculiar circumstances.

ON THE NATURAL HISTORY OF SYPHILIS.

Dr. Drysdale, in treating of this subject, explained that he wished to make a few remarks upon the lesions which he had found, in his own experience, to arise when the disturbing influence of mercury was withdrawn. Comparative statistics having convinced him, as it had done others, of the injurious effects of a long course of this drug in syphilis, he had abandoned it, and he wished to ascertain, as far as his materials served, what was the natural course of the disease. His experience led him completely to endorse the opinions as to the nature of the disease entertained by Hutchinson, Cooke, &c., and to class it with the exanthemata; and he would endeavour to present the points of analogy as follows:—Firstly, as regarded incubation. In scarlatina the incubation varied from a few days up to three weeks; for typhus fever, from days to weeks; for inoculated variola from four to eighteen days. This was imitated by the primary lesion in syphilis, which had an incubation period varying from a few days up to two months; the soft sore, on the other hand, had no incubation. To prove this assertion he cited some cases, as—Case 1. A young woman, aged 19, had indurated sore on lower lip, followed by roseola and sore throat. Seen 10th March, 1865. Had observed the sore first on the 1st of March. Her friend, to whom she was engaged, had bitten her lip in play about the beginning of February, 1865. Incubation, three weeks. Case 2. E. K., 42, during his wife's confinement, July, 1865, went with a strange woman once, at the beginning of the month. Indurated sore appeared in September. Pustular syphilis in October. Two months of incubation. On the other hand, he had notes of cases where there seemed to be scarcely any incubation period. The next point of analogy between syphilis and the exanthemata lay in the period which elapsed before the appearance o

* Notes on Cholera, p. 87.

the eruption. His experience corroborated that of most writers in making this interval about six or seven weeks. This was, of course, longer than what was seen in variola, but in some cases of malignant syphilis this interval was much shorter. The eruptive period of syphilis constituted in many healthy persons almost all that had to be said about the disease. The eruptions in such cases assumed the forms of roseola, lichen, and psoriasis, and had a tendency to fade away and reappear for periods varying from weeks up to months, and, in rare cases, to years. During the whole of the eruptive period the disease was contagious; as Vigo said long ago, "Notum est quod morbus gallicus contagiosas est; tamen contagio ista non extenditur nisi in principio morbi." Dr. Drysdale said he confidently believed that during this eruptive period the internal parts were scarcely ever attacked, except in infants. In healthy adults, these eruptions when not interfered with except by good diet and attention to hygiene, &c., gradually died away, leaving the patients for the most part completely free from any recurrence of the disease. He had seen numerous examples of this fact. On the other hand, when patients were of scrofulous constitution, delicate in health, drinkers, or worn out by fatigue, poverty, or bad living, or still more by the debilitating effects of mercurial courses, the eruption was not the end of the disease, and was itself often of a formidable character. Rupia with large blebs might be the very first symptoms observed, with great prostration of strength, and even in rare cases death. Such cases were fortunately rarer now than formerly. Rupia might, in his experience, occur from weakness of constitution and bad hygienic causes alone. Old age or extreme youth were unfavourable in the prognosis of syphilis. Women in general, he thought, suffered more than men in proportion to the very small number of them infected, as compared with men. Alopecia occurred in about sixteen out of twenty cases of natural history of syphilis in his experience. Crusts in the hair about as frequently. Roseola was by far the most frequent form of skin eruption, then papules, then squames, then pustules. He had seen one case of syphilite orchitis among those treated, eighteen months after infection. Iritis had occurred twice in fifty cases of natural history. Serpiginous sores, especially of the lower limbs, were not uncommon, and came on after the eruptions faded. Mucous tubercles and sore throat were extremely common in the natural history of syphilis. Periostitis was not common in the eruptive period. Tertiary syphilis was only a rare event in the natural history of the disease. In his experience the lesions of this stage most frequently seen were corneitis, serpiginous ulcers, emaciation, and affections of the fauces, nostrils, and larynx. He had not often seen deafness to arise in adults, although in the cases of inherited syphilis seen at hospitals, deafness was seen in one-tenth. He had seen a case of ascetis with albuminuria, lately, when he had some idea that there existed syphilitic inflammatory deposits in the liver. Epilepsy had occurred in one case of natural history he was well acquainted with, and he had often seen it when he could hear no account of such specific treatment having been used. He had seen syphilitic patients dying of phthisis, but had not as yet ventured to look upon syphilis as more than one of the causes of the fatal result. He had also seen many cases of nervous diseases and local and general paralysis in persons who apparently had suffered from syphilis, and had not been much mercurialized; but this was one of the most difficult points to clear up, since it was one of the admitted properties of mercury to cause paralysis, as seen in a large scale at the mines of Idria and Almaden. As to the transmission of the disease to the offspring, his experience led him to say that if the father was affected by the eruptions when he impregnated the woman, the mother and child would be affected, and the latter would either be prematurely born, or soon have eruptions; but after a few years the man lost the power of engendering syphilitic children, although his children might be ricketty. If the mother were alone infected, he had found that the offspring were likely to be affected for several years; but that the later born became healthy. When the woman was infected during pregnancy, she rarely infected the child. Case 3. A lady, seen June 2nd, 1866, with sore throat, complete alopecia, and mucous tubercles, brought with her an infant fourteen days old, which was and had remained uninfected. The mother was infected two months before confinement. Children were very rarely, he thought, infected at birth, but he had seen several cases of infection shortly after birth. He had seen one case of syphilis communicated by vaccination, where both parents were healthy. Summing up the results of his experiences, he would say that all the lesion which we were accustomed to see among mercurially treated patients might also be seen in the natural history of the disease when no mercury was used, but that the severer forms occurred very much more rarely, and at a far later period, when the drug was dispensed with, that such cases were much more easily restored to health. Again, the natural history of the disease showed children infected for some years, and then healthy ones appearing, whilst in mercurial cases abortions and infected children might in his experience go on indefinitely. With regard to the prognosis of inherited syphilis, he had found it to be very grave, if the eruption appeared soon after birth; but if the eruption did not appear until two months or more after birth, the prognosis in general was favourable, if simple means were used. As to cases of inherited syphilis in after life, he could not say much about them as yet, since the oldest patient he had thus treated was only five years old; but that child, a boy, was in good health, and could not be detected as one of the cases of inherited syphilis described by Hutchinson. He was inclined to think that the prognosis of the disease was far graver in childhood than in adult life. In conclusion, Dr. Drysdale said that it was deplorable that there were so few observations given forth of natural histories of syphilis. With the exception of Boeck, Baerensprung, Diday, &c., he could scarcely enumerate any number of authors who had given numerous histories of this kind, whilst M. Ricord and his pupils' habit of giving six months daily doses of mercury had so completely, either for good or for ill, obscured the disease, that it would require at least twenty years before much could be said about the natural history of syphilis. Mr. Allingham and Mr. Dunn had done much for the natural history of infantile cases.

Mr. De Meric observed that the author's paper was able, but very much wanting in method. It was called an essay on the "natural history of syphilis," but it was in reality a philippic against the use of mercury. As the author did not employ mercury, any cases he might have given would have been very valuable. However, as he had followed the plan he had done, he (Mr. De Meric) would make some remarks on one or two points in the paper. Firstly, he did not by any means admit the cogency of the analogy drawn between syphilis and variola. It was true that there was some similarity, but there was immense dissimilarity also between syphilis and the exanthemata. The very length of incubation referred to by the author, and of which he had lately had an example when the period was so long as two months, was against the analogy. Then again, the relapses which were so common in syphilis were unknown in variola, &c. In small-pox we saw a hurricane at first, and then all was over; but this was by no means the case in syphilis. Next, the author had launched into the question of visceral syphilis, and also into that of inherited syphilis, although neither of them had anything to do with the natural history of the disease, and then he had concluded with mentioning the treatment of the disease. Now, with regard to this he must say that when we saw a patient with indurated sore, he thought we had no right to withhold mercury; twenty years of practice with mercury, with few evil results ensuing, and much good, had convinced him how necessary it was. Nevertheless, such discussions did good by forcing persons who gave mercury to look well into the matter, and as they were always conducted by the author in a most polite and courteous manner, they were very agreeable.

Mr. Berkeley Hill said that it was unprofitable to touch on more than one or two of the numerous points raised in the author's papers. With regard to the question of comparative treatment of the disease, as recorded by Boeck and Bidenkap in Christiana Hospital, it was asserted by Dr. Boeck that the number of relapses when he cured syphilization was only ten per cent., whilst when derivation was used it was 23, and when mercury was used it was 33 per cent.; but it must be observed that the patients who were syphilized were kept in hospital so long that they got through all their relapses before they went out, whereas when derivation or the blister plan was used in 140 cases, the patients went out, had a relapse in a week or two, and then came back.

Mr. Curgenven said that he had seen several cases of natural history of syphilis, of which the following were examples:—A tailor, with urethral chancre, had sore throat and eruptions, and took no treatment. His first child died; his second also and his wife were infected. He then placed both under bichloride of mercury; they both got well, and had a child, which recovered from eruptions under mercury. In the case of another patient, a soldier, treated without any specific, seven years afterwards on the eve of marriage sores broke out again like the old sore.

Mr. Benson Baker said he took much personal interest in this question. Some months ago he pricked his thumb, when making a post-mortem examination, and having soon after to perform circumcision, he was infected; in a day or two his thumb was indurated, he had large glands in the axilla of same side, and in six weeks afterwards he had eruptions of roseola; not wishing to take mercury he went to the sea-side, and the eruptions disappeared; but on returning to London they broke out afresh, when, on the advice of Mr. Gascoyne, he took mercury, and he was now without any eruption. He had often heard from veterinary surgeons that they had seen gonorrhœa and sores on the penis in dogs, and thought that this would be a very curious matter for investigation.

Mr. Henry Lee said that Dr. Boeck's point was that the indurated sore, when frequently inoculated on syphilitic persons, could be re-inoculated again and again in a series. The learned professor had come over here a year ago, and yet, up to this time, not a single case of verification of his results had been obtained. Now, although we might see it some time or other, life was short, and he would like to see the thing done before he died. It must be remembered that, in the Lock Hospital, no care was taken to cover up the sores of those practised upon; hence there were many ways in which the matter from soft sores might be conveyed, and this became a means of infecting other patients. As to the natural history of syphilis, he continually saw bad results where the disease was left to its own course. A medical man, a friend of his, has some after symptoms, and upon his being asked by Mr. Lee whether he did not regret not having taken mercury at the commencement, he replied, "Certainly, I do very much repent it." With regard to visceral syphilis, however, he was inclined to think that the use of mercury, internally, might give rise to such symptoms. This result he avoided by only administering the metal in the form of calomel vapour bath.

The President said that his experience of syphilis was mainly in cases of pregnancy and infected children. A man he had often seen might marry without any sign of syphilis about him, and to all appearance in perfect health, and yet his wife might have syphilitic abortions her whole life. He had known a case like this, where the husband was so affected that he committed suicide. This occurred in a wealthy gentleman in whom the mercurial treatment had been tried. Again, he had often seen a man syphilitic, and his children all syphilitic, and the mother remain uninfected. In some women the disease seemed to pass through them without doing much damage to their constitution. He remembered when the first non-mercurial treatment of syphilis appeared. He saw a death from rupia under this treatment. For infants, the best treatment, he thought, was the flannel band with unguent hydrarg.

Mr. Sedgwick mentioned the case of a tailor, in whom there was no trace of syphilis to be seen; his first three children, however, died of the disease. The fourth is now strong and healthy. He thought that as a rule we could not regard the paternal influence as nearly so strong in the production of syphilis as the maternal.

Dr. Meredyth gave the case of a patient whom he had treated by the expectant method for roseola and erosion, and had treated the alopecia and headache by means of iron. No new appearances had been seen in this case. Three years after this he had delivered this gentleman's wife of a healthy infant, and this child, now two years and a half old, was in good health. On the other hand, he had seen lately a case of necrosis of the frontal bone in a patient, who never had taken mercury. As to syphilization, he had tried inoculations of indurated sores on persons with syphilis, day after day, for six weeks, and had never obtained any result.

Dr. Drysdale thanked Mr. De Meric for his strictures on his method, and should try another time to avoid the word mercury. He wished, however, to remark that Dr. Diday in his "Natural History of Syphilis," had found it necessary to speak of the mercurial treatment all through the book. No one treated scarlatina, or measles, or variola now by attempting to cure these diseases. They only did then but to keep the patient up whilst the disease was being eliminated, and this they ought to do when the eruptions were eliminating the syphilitic veins. If Mr. De Meric and Mr. Lee would lay their hands on their hearts and say that they were well acquainted with the natural evolution of the disease, and that they preferred to alter this evolution by attempting to cure the disease by mercury, he would say no more; but he knew very well that these gentlemen were not well acquainted with the natural history of the disease, since wherever they saw it they gave the so-called specific. With regard to Mr. Curgenven's cases, they were interesting, and he hoped he would give some more like these. Mr. Benson Baker's own case was most instructive; 1st, there was no incubation of the sore; 2nd, there were six weeks' incubation of the eruption; 3rd, the eruption faded by change of air; and 4th, as usual, again appeared. This quite accorded with his own experience, and had he been in Mr. Baker's place he would have been quite prepared for it. With regard to Mr. Lee's vapour bath treatment, he saw nothing against it. He continually advised simple vapour baths in roseola, and as calomel was insoluble it could do no great harm, as it did not, he believed, ever enter the system, unless the patient inhaled the vapour, which might of course salivate him. But this appeared not often to occur. Upon the whole, he thought that Mr. Lee might very fairly be considered as a follower of the natural history treatment of the disease, since he encouraged the skin to throw off the virus by means of the vapour bath. There was no doubt that using calomel along with it made many persons attach a superior efficacy to the bath, and that it was one way of treating them rationally without alarming their prejudices. He concluded by thanking Dr. Meredyth for his contribution of such an interesting case to the natural history of the disease. Lastly, with regard to syphilization, he believed that were it not for the unpleasantness of the process and the trouble it gave to the medical attendant, there was more in it than was dreamt of in our philosophy; and as he had found Dr. Boeck more learned upon the subject of syphilis than any other authority he was acquainted with, he hoped sincerely that syphilization might yet be found to prove of service in difficult cases, although the inoculation of hard sores on syphilitic persons required to be further experimented upon by persons of unbiased judgment like Mr. Lee.

OBSTETRICAL SOCIETY OF DUBLIN.

Dr. Atthill detailed the particulars of a case of

INTRA-UTERINE POLYPUS.

The patient was an unmarried woman, aged 45. She was in an extremely weak and emaciated condition, being rendered almost exsanguine by the repeated and latterly continuous attacks of uterine hæmorrhage. On vaginal examination the uterus was found to be greatly enlarged, perfectly globular, the cervix being entirely obliterated, and the os closed, so much so as to admit with difficulty the point of a uterine sound. A small sponge tent was carefully introduced into the os, which dilated it in a few hours to the size of a sixpence. On its removal this was at once replaced by a larger one, and finally by one of even greater size. These acting very satisfactorily opened the os to the size of a crown-piece. Dr. Marion Sims' intra-uterine ecraseur was then introduced, but all attempts to snare the polypus with it failed. An ordinary wire ecraseur was then tried with no better success, the extreme narrowness of the vagina, and the unyielding nature of the uterine walls adding greatly to the difficulty of the operation. Recourse was then had to Gouche's canula, with which, after some difficulty, a ligature of double whip-cord was carried round the pedicle and tightened. Some vomiting followed. The ligature was tightened morning and evening by means of a winch, ingeniously adapted on the plan suggested by Dr. Beatty, to the end of the connecting rod of the canula.

Five days elapsed before the ligature cut through the pedicle, and even then the polypus was retained in utero, and had to be removed by means of a small pair of forceps. The polypus, which was fibrous, was the size of a large egg. This woman had more than one well-marked rigor, and much uneasiness was felt lest she should be attacked with pyæmia. In order to obviate the risk which the slow action of the ligature entails, Dr. Atthill devised and exhibited to the meeting an instrument which may be briefly described as an adaptation of the canula of Gouche to the ecraseur, the end of the ecraseur being modified so as to allow the canula, by which a wire rope is carried round the pedicle of an intra-uterine polypus, to pass through it, the rope being then attached to the ecraseur. The operation is completed as by an ordinary wire ecraseur, thus uniting the rapid action of the ecraseur to the facility of application afforded by the canula of Gouche.

THE HEALTH OF LONDON.

(From the Weekly Return of the Registrar-General.)

In the week that ended on Saturday, December 29th, the births registered in London and twelve other large towns of

the United Kingdom were 3998; the deaths registered 3071. The annual rate of mortality was 26 per 1000 persons living.

In London, the births of 990 boys and 910 girls, in all 1900 children, were registered in the week. In the corresponding weeks of ten years 1856–65, the average number, corrected for increase of population, was 1871.

The deaths registered in London during the week were 1436. It was the fifty-second week of the year; and the average number of deaths for that week is, with a correction for increase of population, 1554. The deaths in the present return are less than the estimated number by 118.

The daughter of a pen merchant, aged 16 years, died on 23rd December, at 3, Boar's-head-yard, Whitechapel, of Asiatica cholera (14 hours).

Fourteen deaths from diarrhœa were registered during the week.

Small-pox proved fatal to 27 children and 8 adults; it was not stated in the returns that in any case the patient had been vaccinated. In the sub-district of Christchurch, Marylebone, 5 deaths from small-pox were registered. The registrar of the sub-district of St. Giles South, remarks that "small-pox is very prevalent and great inconvenience is felt from the want of proper accommodation for patients suffering from the disease."

Twenty-five deaths from measles, 41 from scarlatina, 10 from diphtheria, 58 from whooping-cough, and 41 from typhus were registered during the week.

The influence of the temperature on the mortality from diseases of the respiratory organs is very great. In the week which ended October 13th, the mean temperature of the air was 52·4 degrees, and the deaths from bronchitis were 89; as the air became colder, the deaths from bronchitis increased; last week the mean temperature was 44·0 degrees, and the deaths registered from bronchitis were 224.

Eight deaths from burns or scalds were registered in the week. One of the unfortunate victims was a domestic servant, whose clothes took fire when distended by crinoline.

A child, aged one year, died on 21st December in consequence of swallowing mistletoe berries.

The annual rate of mortality last week was 24 per 1000 in London, 28 in Edinburgh, and 24 in Dublin; 25 in Bristol, 26 in Birmingham, 33 in Liverpool, 30 in Manchester, 25 in Salford, 28 in Sheffield, 27 in Leeds, 23 in Hull, 37 in Newcastle-upon-Tyne, and 27 in Glasgow.

The high rate of mortality which has prevailed during the past thirteen weeks in Newcastle-upon-Tyne has been caused by an unusually fatal epidemic of scarlatina, from which 220 deaths have resulted in the past seven weeks out of a total of 601 deaths.

METEOROLOGY OF 1866.

By R. H. ALLNATT, Esq.

The past year has been fertile of meteorological phenomena, and was marked by great insalubrity, and in some of the summer months the death-rate exceeded the estimated average by nearly a thousand. To what influences are to be attributed the pathological conditions which prevailed, and how far may they be due to the specific action of atmospheric combinations? The issues are of vital importance, and can only be approached by patient deduction from physical facts. It may be mentioned, "in limine," as an extraordinary, and, according to our present notions, most anomalous occurrence, that during the height of the late epidemics—the cholera and cattle plague—ozone manifested an almost unbroken series of maximum development, and on the cessation of those diseases the monthly average gradually diminished to a point two-thirds at least below that of its full registration. Deep purple mists, which spread at various periods over the landscape, gave evidence of the antagonistic action of atmospheric and telluric electricity.

January.

The new year was ushered in by a wild tempestuous wind and driving rainfall. The month was remarkable for its high atmospheric temperature. On the 12th, amid showers of sleet and snow, the thermometer sank 12 deg. below freezing, and in a few hours rose to 46 deg., and during the remainder of the month once only fell so low as 35 deg. On the night and morning of the 22nd the respective barometric readings were 47 deg. and 50 deg. Fahrenheit. A terrific hurricane raged on the 3rd, and minor gales on the 7th and 8th. There were alternate periods of ozone and antozone. Rainfall occurred on 16 days, and amounted to 4·62 in., which is considerably above the recognized average of the month. There were three cloudless days, and the predominant wind was tropical, W. or S.W.

February.

On the 11th an equatorial cyclone raged, accompanied by frequent flashes of lightning from S.W. At Frant, Sussex, which, as the crow flies, is about 25 miles from the sea, the gale committed great havoc, the pressure being somewhat about 40 lb. to the square foot. Houses were partially unroofed, and at Eridge-park, one of the seats of the Earl of Abergavenny, 3000 trees were uprooted by the fury of the blast. Spray from the sea was borne nearly 30 miles. Intermittent tropical gales occurred also on five other days, and were preceded or followed by auroræ boreales, streams of electric cirrus, lightning, and solar haloes. Diurnal oscillations of the barometer were considerable, and ranged from 29·40 in. to 30·30 in. Rainfall extended over 15 days to the extent of 5·33 in.—upwards of 3 in. above the mean. The prevailing cloud, which almost daily obscured the sky, was the composite or rain cloud, fully developed. Three days alone were cloudless.

March.

The passing of large solar spots gave rise to high magnetic action, and consequent atmospheric perturbations. The prevailing winds were keen and bitter from N. and E., and the whole month was abnormally unhealthy. During the first three weeks the registered rate of mortality was upwards of 500 above the average. There was not one cloudless day; tropical and polar winds were almost equally balanced; rain fell on 19 days, and amounted to 1·90in., which is below the acknowledged mean of the month by about the eighteenth of an inch.

April.

Three consecutive days were cloudless, when the sun shone with full vigour, and a cold and detrimental E.N.E. wind prevailed. Barometric readings were high, and ranged from 29·00in. to 30·00in. The wind in combination touched the N. and E. on 15 days, and on the remainder it was complicated with S. and W., so that the balance was nearly equalized. The mean temperature of the month was considerably lower than that of last year; the range by day was from 40 deg. to 62 deg., and by night from 34 deg. to 55 deg. On the 26th, at 2 P.M., the thermometer in full sun rose to 111 deg.; in shade, N. aspect, it stood at 70 deg. On the 29th it had fallen full 30 deg. Rain fell on 19 days, and amounted to 2·41 in.; from the 2nd to the 4th, inclusive, it was mingled with snow and sleet. From the 1st to the 30th, de die in diem, the ozonoscopes registered 10 deg., or the maximum of ozone.

May.

The weather of this month was marked by extreme unhealthiness. Towards the latter portion the wind became established in the N.E., and sometimes blew with the fitful violence of a gale; hoar-frost frequently covered the ground, and vegetation was greatly retarded. The mean temperature was little above 51 deg., which is 8 deg. lower than that of last year. The variation was from 40 deg. to 61 deg., thus making the range of morning temperature 21 deg. Hail fell on the 3rd and 4th, and rain on ten days, amounting in the aggregate to 1·0 in., which is considerably less than the acknowledged monthly mean. Cloud predominated on 21 days; the modification was that of the composite or thunder-cloud, either fully formed, or the elements existed isolated in their respective wind currents. The diurnal oscillations of the barometer were limited, and the entire range was below an inch. As in last month, so in this, ozone manifested a consecutive daily maximum, and notwithstanding the full development of this allotropic condition of atmosphere, the rate of mortality was excessively high, and diseases raged, which are supposed to be specially controlled by its sanitary influence. The hygrometric state of the air was very low, amounting sometimes to 50 per cent. only of moisture; telluric evaporation was consequently rapid, but was speedily carried off by the stirring winds that prevailed.

June.

We have the recorded rate of mortality again this month unusually high, the aggregate, corrected for increase of population, having amounted to little short of 1000 beyond the estimated average. The rainfall, though not excessive, was some-

what above the mean, and was spread over 14 days. The temperature represented less, certainly, than the average of past years; but, nevertheless, it maintained a considerable elevation. There was during the month but one purely cloudless day, and thunder clouds, or their elements in antagonistic currents, existed perpetually. The winds at the commencement and for nearly three consecutive weeks were tropical concomitants of thunderstorms, and were generally paroxysmal or squally. Atmospheric pressure underwent but slight variations, and the diurnal oscillations were comparatively inconsiderable. The range of the thermometer was 20 deg. The highest night temperature 63 deg., and the lowest 47 deg. The maximum reading occurred on the 28th under the influence of a N.E. wind, and the lowest on the 6th, beneath a tropical and gusty S.W. wind. Ozone was very largely developed, the maxinum, or 10 deg., having been reached on 24 days. The hygrometer registered a fair balance of atmospheric humidity, varying from 15 to 50 per cent.

JULY.

The whole of this month was also marked by great unhealthiness, and the temperature manifested strange fluctuations. During the first week the morning register ranged from 56 deg., to 60 deg.; and the night from 40 deg. to 56 deg., and rainfall occurred every day. On the 9th the weather became dry and sultry, and on the following day the thermometer rose to 71 deg., at a later hour to 80 deg., and in the sun to 114 deg., marking a difference within a brief period of temperature amounting to some 35 deg. The predominant cloud modification was the composite, or raincloud, which occurred on 22 days, and frequently entirely obscured the sun. Four days were free from cloud, and rainfall, with very unequal distribution, extended over 11 days, and amounted in the aggregate to 3·05in., which exceeds the accustomed mean by nearly one inch. From the 8th to the 28th no rain fell—or rather during that time there was no appreciable gauge. Tropical winds predominated and occasionally they were high and squally, but once only, at the end of the month, attained the force of a gale. The estimated average temperature of July is 61·07 deg.; this year it exceeded that amount by 3 deg. The maximum of ozone was registered on every day but one.

AUGUST.

But one solitary cloudless day during the month. The predominant modification was the cirro-cumulo-stratus, or thunder cloud. On the 17th masses in two strata and adverse wind currents formed rack and scud, and undulating waves of cirro-cumulus frequently overspread the sky. On the 6th and 7th, 8th and 9th, cold, high, tempestuous winds blew from S.W., sometimes with the force of a hurricane. On the 16th and 17th equatorial gales again prevailed, and produced considerable damage on our coasts. Barometric oscillations were frequent, but limited in range; the highest point attained was 29·72in., the lowest 29·00in., so that the entire variation was scarcely three-fourths of an inch. Up to the date of the 20th the mean temperature was considerably below the standard, but on that day a change occurred, and the thermometer rose and registered consecutively above the average until the 29th. The highest morning reading, at 10 A.M. on the 24th, was 75 deg., and the lowest, on the 4th, 59 deg.; the range, therefore, was 11 deg. The maximum divergence between day and night temperature was 27 deg. Rain fell on 18 days, and was below the average by 0·15 in. Lightning and thunder, electric cirri, haloes, and other meteors were frequent, and ozone began to decline. The 10th, 15th, 22nd, 29th, and 30th were periods of antozone.

SEPTEMBER.

This month was characterised by the prevalence of wild, tempestuous gales, and excessive rainfall. The wind on 25 days blew from W. and S.W., and on the remaining days came in complication with N. and E. Tropical gales from S.W., extending throughout England, raged on the 2nd, 5th, 6th, 11th, and with somewhat mitigated force on other occasions. On the 24th, at 11 P.M., a cold atmospheric wave passed over Frant, Sussex, and produced transient condensation and sent down the thermometer several degrees. The mean temperature of the month was 7·06 deg. lower than that of last year, thus bringing it into close proximity with the general average of the season. The variation of the barometer was 0·10 within the inch. Rain fell every day from the 1st to the 27th, and amounted to upwards of 6·50 inches, which is more than 4 inches above the mean. Ozone continued to decline, and was below the average, but there was no apparent period of antozone. Fogs, light mists, and abundant dews occurred throughout the month, sometimes producing complete atmospheric saturation, when external objects streamed with their accumulated condensation. Lightning and thunder visited the North and East Ridings of Yorkshire on the 16th, and slight shocks of an earthquake are reported to have occurred in Devonshire.

OCTOBER.

A month of cloud and gloom and sunless days. On five or six occasions the hygrometer denoted complete saturation. The predominant combination of winds was E. and N.E. On the 18th a tropical gale occurred, but on the whole the action of winds was very moderate. The diurnal oscillations of the barometer were considerable, but limited in extent. A lunar rainbow, succeeded by a dim gray halo, appeared on the night of the 23rd. They were followed on the succeeding day by copious rainfall and heavy radii of cirro-stratus from N.W. Rain fell on seven days, and amounted, in gross, to 1·90in., which was below the average by 0·18. Ozone again fell below the mean, and there wers several well-marked periods of antozone.

NOVEMBER.

Mensis Mirabilis.—The marvellous epoch of meteors. This month was marked by destructive gales, disastrous floods, and other signs of violent atmospheric perturbation. The rainfall was of very unequal distribution, and some of the northern counties were deluged by successive torrents, while others were visited by scarcely their normal average. One day alone was free from cloud, the prevailing type was the composite, or rain cloud, often in varied and beautiful modifications. The complications of wind from W. greatly preponderated, and the gales were generally equatorial. The first frost of the season occurred in Yorkshire, on the night of the 10th, of sufficient severity to blacken or destroy the tender annuals; but generally the month was marked by unusually high temperature. The night register, on several occasions, was 50 deg., and twice only, on the 20th and 21st, it fell below freezing. Ozone continued to exhibit a deficiency, and there were several periods of antozone.

DECEMBER.

The past month was ushered in by a cold S.E. gale, and such depression of atmospheric temperature as gave promise that Christmas this year would assume his ancient prerogative, but the wind having lulled, the thermometer rose upwards of 20 degrees, and the frost of the previous night was followed by a warm equatorial wind from S.W. Several minor gales occurred during the month, and high and squally winds, which committed considerable damage. There were two cloudless days, and twenty-two days on which a canopy of rain-cloud overspread the sky. The highest reading of the barometer was 30.45in., and the lowest 29·35in., thus denoting a range of 1·10 inches. Atmospheric temperature attained its maximum on the 4th, when it registered 55 degrees in the morning, and 54 degrees by night. The lowest was on the night and morning of the 2nd, when the respective readings were 28 and 31 degrees; during the remainder of the month the temperature, with oneexception (on the 31st), never sank below freezing. Rain fell on twenty-two days, and amounted to two inches, which is fractionally below the average. Ozone was very scantily developed, and there were nine periods of antozone, when the tests, after due exposure, remained pure and uncoloured. The hygrometric condition of the air was tolerably uniform, and one day only denoted saturation. The rate of mortality was below the average.

Thus has passed away this memorable year, leaving in indelible characters traces, upon living witnesses, of its wonderful phenomena and antagonistic manifestations. No theory has yet been propounded of the dynamics of atmospheric combinations, but the day may not be far distant when even these recondite mysteries shall be solved by the human mind.

Correspondence.

ON THE PROPERTIES OF OZONE—A NEW TEST FOR BLOOD.

TO THE EDITOR OF THE MEDICAL PRESS AND CIRCULAR.

SIR,—I believe I have discovered a most beautiful and delicate test for blood, but as it is not quite three weeks since I first tried it, I may learn, after a time, that it is not quite as reliable as I now think it. I borrowed the idea from Schonbein, who says, "Blood-globules, on addition of tincture of guaiacum

and oxygenated water, produce a blue colour, so characteristic, that a very slight trace of the globules can be recognised in this manner: water coloured with defibrinated blood, so as to be slightly red, forms a mixture of tincture of guaiacum, and oxygenated water blue, markedly and quickly. I recommend this re-agent—the most delicate I am acquainted with—to the notice of physiologists and those who interest themselves in the application of chemistry to medical jurisprudence." Following out Schonbein's views that ozone cannot be formed without the simultaneous production of antozone, I was led to try the effect of ozonized ether and tincture of guaiacum on blood; the reaction was immediate, and resulted in a most beautiful and, I think, permanent blue. I send you three specimens, marked one, two, and three, and also painted in water colours, a very fair representation of them as they appeared a few hours after the test was applied. By this test it is quite easy to detect the smallest possible trace of blood, old or fresh, and on any fabric. It seems to be chiefly the blood-globules that give rise to the reaction. Albumen slowly produces a rather dull green, quite different to that produced by blood-globules. You will find Schonbein's theory of the reactions in an article headed "Action of Oxygen on the Blood," published in The Medical Press and Circular, dated, I think, June 27th and July 4th. I wish I could send you some of my ozonized ether, and some of my ozonized essential oils. I have recently tested their power of destroying the product of decaying organic matter in the closets of a large public school. Before I operated on them the stench was intolerable; now the atmosphere is not only pure, but agreeable. My plan is as follows:—In an ordinary case I suspend a piece of sponge or of flannel in the closet, and occasionally sprinkle over it a few drops of ozonized ether, combined with about a sixth or an eighth of some ozonized essential oil. Oil of lavender is, perhaps, the pleasantest. Oil of capsia or of juniper answers as well. In my own closet I have adopted this plan for the last two years, and it has become quite famous for its purity.

In any bad cases I mix a small quantity of ozonized ether and some ozonized essential oil in a large quantity of pure rain-water, and wash the atmosphere with it by means of a garden syringe with an extremely fine rose.—I remain, &c.,

John Day, M.D.

MR. P. C. SMYLY'S REPLY TO MR. RICHARDSON ON HOLT'S DILATOR.

TO THE EDITOR OF THE MEDICAL PRESS AND CIRCULAR.

Sir,—Circumstances have prevented me answering Mr. Richardson's note sooner. In my short note I used the word misstatement, knowing that Mr. Richardson was well acquainted with the facts of the case, not only from the very able paper of my colleague, Professor Macnamara, when he introduced the instrument to the profession in this country, but also from the discussion at the Surgical Society of Ireland on a paper read by me on the immediate plan before the Surgical Society of Ireland when the differences between Perréve and Holt were discussed. Mr. Richardson has very dexterously pointed out the similarity between the two instruments. As to the differences I will allow Mr. Holt to speak for himself. I enclose you his letter.

I again ask the candid reader—Can an instrument brought before the profession in 1847, and rejected as dangerous, be the same as that introduced many years later by Mr. Holt, and received as valuable and safe?—Yours sincerely,

Philip C. Smyly.

Dear Sir,—Your letter in reference to the instrument that bears my name (which has been pointed out to me in the Gazette and Medical Press and Circular) has provoked a long explanation from Mr. Richardson, the personal part of which I refrain from referring to. The first of Mr. Richardson's remarks is contained in the following paragraph:—"But for all practical purposes, and in all the essentials, I repeat, the two instruments are identical in form and action, so much so that the instrument used by Mr. Holt is evidently a reproduction of M. Perréve's."

Mr. Richardson is in error. The instrument that I use is so different in detail that I am surprised it has escaped Mr. Richardson's observation; to my mind it is the difference between failure and success. In Perréve's dilator there are three errors—first, you have no positive means of knowing when the instrument is in the bladder; second, there is nothing to prevent the tube slipping from between the blades; and third, the directing rod projects so far beyond the handle of the instrument as to prevent the tube being quickly thrust between the blades, so that the stricture or strictures may be fairly split. The drawing Mr. Richardson has given does not represent the instrument I now use, and although the principle is the same as Perréve's, the detail is so entirely different as to have insured the use of my modification with almost universal success, while that of Perréve has been entirely abandoned. Mr. Richardson has likewise alluded to the method of treatment, which here again is entirely different. Perréve did what Thompson is now doing, dilated rapidly. I, on the contrary, am never satisfied without the stricture is split. I conceive it to be a very great error to rapidly dilate strictures, and the quickness with which they recontract when so treated justifies me in that conclusion. Without wishing in the least degree to detract from the merits of Perréve's invention, I must assert that the instrument that bears my name is so far different from Perréve's that in mine you have all the elements of success, while in Perréve's there are errors which have made its use unsafe even in experienced hands.—Believe me, dear sir, faithfully yours,

Barnard Holt.

Philip Smyly, Esq.

You are at liberty to use this note as you think fit.—B. H.

THE SYMPTOMS AND TREATMENT OF EPIDEMIC CHOLERA.

TO THE EDITOR OF THE MEDICAL PRESS AND CIRCULAR.

Crudelis ubique
Luctus, ubique pavor, et plurima mortis imago.

. . . . . .

What dark forebodings tinge with gloom my mind?
I hear strange voices in the coming wind.
Across my pathway, in the evening hour,
Fantastic shapes and beckoning spectres pour.
And in the clouds, careering through the sky,
I see a thousand funerals flitting by.
Are these prophetic of approaching death—
Of cholera, that dread disease, of which the vital breath
Deserts the frame—life's turmoil is o'er,
And pain and misery rend the heart no more?

But should not the disease terminate under the favourable forms described, the third grade, or fully developed stage of the malady succeeds—namely, great vertigo, distressing nervous agitation, and restlessness, oppression of chest and precordial region, with total loss of muscular power, great collapse of the countenance, the eyes turned up, exposing the sclerotica, and surrounded by a deep and dark circle, sharp and contracted features, wild and terrified expression of countenance, and a feeling of immediate dissolution. The whole surface of the body—especially the hands, face, and extremities—assume a leaden blue or purplish hue; the extremities are shrunk, shrivelled, and sodden; the skin deadly cold, damp, and raw to the touch; the nails blue; the course of the large superficial veins are marked by flat lines of a darker tint than the adjoining skin; the tongue moist, flabby, and ice-cold, rarely contracted to a half or third of its size, dry, and of an ochre colour. Pulse, if perceptible, slow, thready, and irregular; profuse vomiting and purging of a wheyish or rice-water coloured fluid, which is ejected with great force, mixed with whitish flocculi; cramps commencing at the fingers and toes, rapidly extending to the trunk, or vice versa. The voice is nearly gone; respiration quick, imperfect, and most laboured; the patient painfully struggles for breath; inspiration is effected by immense effort, and expiration hurried and spasmodic, the expired air being ice-cold; he speaks on inspiration with a plaintive whisper, and utters but a word at a time with a painfully convulsive struggle, producing the well-known vox cholerica; complains of burning heat and pains at the epigastrium (Leiperia), possibly owing to irritation of the solar plexus of nerves, parching thirst, and calls incessantly for cold water; sense of touch is much diminished, and deafness prevails; the integuments of the abdomen are drawn towards the spine and chest; the spasms usually clonic, occasionally tonic, and frequently rigidity of the muscles takes place; the secretions of the eyes, nose, and mouth cease; there is a total absence of bile, suppression of urine, and a faint and sickly odour from the body and evacuations. The patient expresses a wish to be left to his fate. Consciousness continues in the majority of cases to the end or nearly so. He now passes off imperceptibly, or respiration becoming slower, the anterior muscles of the neck contract strongly, the cheeks puff out in expiration, becomes incapable of swallowing, a quivering of the tendons of the extremities, or of the whole body comes on, he gives a convulsive sob or two, and dies.

Ordinarily death takes place in from six to eighteen hours on the first invasion of the epidemic.

The most common time of seizure is between the hours of one o'clock and five o'clock A.M.

This is the epidemic disease in its fully developed form, as first witnessed in India and Russia, and as we have had it presented to us in our own country, exhibiting uniformity of symptoms under every circumstance of locality, climate, and constitution of the affected.

The tongue, as I have observed, appearing in some rare instances contracted to a half or a third of its size, of an ochre colour and dry, is a symptom I have not seen noticed by any writer; those cases in which I saw it were in persons dispirited, suffering from inanition, and nude of all comfort, consequently very unfavourable cases—all in whom I saw it died in a very few hours.

Hæmorrhœa in this grade on its invasion is fearfully fatal; no time allowed for treatment, in fact, it commences in death.

The epidemic form appeared in this country in May, 1831, and in September, 1832, on both occasions in a most malignant form; in Sligo, especially, in the first twenty-four hours upwards of 100 deaths, seven medical men, died in one week in that town.

In the year 1831, of twenty-nine cases admitted to hospital in this town twenty-eight died. In the year 1849 during the summer there were many sporadic cases, especially amongst children, and in September of that year it became epidemic. In 1854 hæmorrhœa appeared in December and continued for months, especially in Cork and Belfast.

Those who recover from hæmorrhœa are not exempted from future attacks; on the contrary, I have found them more susceptible of the disease than those who never had any symptom of it. They become our sporadic cases in many instances.

Your obedient servant, JOHN LENEY, M.D.

SALARIES OF POOR LAW-MEDICAL OFFICERS.

TO THE EDITOR OF THE MEDICAL PRESS AND CIRCULAR.

DEAR SIR,—The Medical Officers of Workhouses and Dispensaries in Ireland may desire to know the result of the memorial of the Medical Officers of Sligo and Leitrim, addressed to Lord Naas in favour of salaries and superannuation pensions being paid from the Consolidated Fund. The Chairman and Secretary presented the Sligo and Leitrim memorial, and had a favourable reception. Lord Naas seems sincerely disposed to legislate for our interests. He wishes us every success, admits that we are not adequately remunerated, and fears that where officers can have private practice it would be difficult to establish our claims to superannuation pensions. I replied that our private practice was destroyed by red ticket practice, which any one can obtain who may apply, and once a ticket is tendered a fee could not be accepted even if it were offered, that not a single practitioner could or did exist on private practice alone in the counties of Sligo and Leitrim, that I refused midwifery practice beyond my district, lest I should disappoint applicants upon visiting tickets in my district, that the Sligo Resident Medical Officer of the Lunatic Asylum could be absent daily upon out-door private practice, and could retire upon full pay after twenty years service if infirm. His Lordship seemed surprised to hear this. I need not proceed further on the interview. I believe that if the Medical Officers and Boards of Guardians of Ireland petition the Government in favour of our salaries and superannuation pensions being paid from the Consolidated Fund, that both will be granted. We, of course, could not expect Lord Naas to declare his sentiments on the subject, but that his Lordship is well disposed to act justly towards the Medical Officers I feel convinced. Will all unite now or never to represent their strong claims?

Half the Poor-law medical expenditure in England being paid from the Consolidated Fund for the last twenty years, gives Ireland a strong claim now, which was recognized by a vote of the House of Commons last session, through the combined influence of Irish members of all parties upon the late Government.

If Irish members combine again upon the measure we now solicit they will succeed. We have the support of the five members for Sligo and Leitrim in our favour.

It would appear that close on two million pounds are due to Ireland, which sums England received towards her poor-law medical expenditure during the last twenty years. Why should not all urge their common claims now, and their representatives to support them? What we seek would not only relieve the poor-rates immensely, but remove Medical Officers from the tender mercies of Guardians, many of whom are very uncertain in their public conduct.

I refer Medical Officers to the Sligo and Leitrim memorial, published in your issue of the 26th December. May we hope that all will address Lord Naas on this important subject.—Yours truly, J. TUCKER, M.D.

Medical News.

LIST OF ENTRIES IN THE REGISTER OF THE BRANCH MEDICAL COUNCIL (IRELAND) FOR DECEMBER, 1866:—

Anderson, John Albert, Cavan, L.R.C.S.I. 1866, M.D., Q.U.I. 1866.
Gogarty, Henry Joseph Kelly, Dublin, L.R.C.S.I. 1864, Fell. 1866, do. do.
Brown, Henry, County Antrim, L.R.C.P.Edin. 1866, L.R.C S.Edin. 1866.
McCarthy, Florence, Dublin, L.A.D. 1866.
Dwyer, Henry, Dublin, L.R.C.S.I. 1866, L. 1866, and L. in Midwif. 1866, K.Q.C.P.I.
Boake, Wm. John Slade, Dublin, L.F.P.S.Glasg. 1866, L. in Med. Univ. Dub 1866.
Cooper, Charles, County Cork, L.A.H.Dub. 1866, L.F.P.S.Glasg. 1866.
O'Connor, Alfred, County Dublin, L.R.C.S.I. 1866.
Beatty, John Guinness, Dublin, L.R.C.S.I. 1866, L. 1866, and L. in Midwif. 1866, K.Q.C.P.I.
Manning, Leonard Archibald, Dublin, M.B. Univ. Dub. 1864, L.A.H.Dub. 1865.
Singleton, William, Dublin, L.R.C.S.I. 1843, M.D. Univ. Glasg. 1845.
Fitzgerald, R. Gerald, Dublin, L.R.C.S.Edin. 1866, L.K.Q.C.P.I. 1866.
MacAlevy, R. Peel, County Down, L.R.C.S.Ed. 1866, M.D. Q. Univ. Irel. 1866.
Robinson, Richard, Golden Ball, County Dublin, L.R.C.S.I. 1865.
Neary, Bernard John, Dublin, L.R.C.S.I. 1865, L.K.Q.C.P.I. 1866.
Hazlett, Henry James, Lurgan, County Armagh, L.R.C.S.I. 1866, L. 1866, and Lic. Midwif. 1866, K.Q.C.P.I.
Keelan, Bernard, County Monaghan, L. 1866, and L. in Midwif. 1866, K.Q.C.P.I., L.R.C.S.I. 1866.
McGann, Terence Joseph, County Clare, L.R.C.P.Edin. 1866, L.R.C.S.Edin. 1866, L.A.H.Dub. 1866.
Alt, Nathaniel William, County Dublin, L.R.C.S.I. 1866, L. 1866, and Lic. Midwif. 1866, K.Q.C.P.I.
Ritchie, James Hutton, Belfast, M.D. 1866, and Mast. in Surg. 1866, Qu. Univ. Ireland.

ROYAL COLLEGE OF SURGEONS OF ENGLAND.—The vacancy in the Court of Examiners of the College of Surgeons, caused by the resignation of Mr. C. Hawkins, was filled up on Thursday last by the election of Mr. E. Cock, Guy's Hospital, the next senior candidate on the Council after the one last elected, viz., Mr. Quain. Mr. Cock became a member of the Council just ten years ago. Mr. Hawkins is still connected with the College as its representative in the General Council of Medical Education and Registration.

DUBLIN OBSTETRICAL SOCIETY—SATURDAY, 12TH JANUARY.—1. T. E. Beatty, on Rigid Perineum. 2. G. H. Kidd, on Cephalotripsy. 3. J. A. Byrne, Case of early Abortion, Hæmorrhage, Morbid Adhesion of Placenta—Removal. 4. S. L. Hardy, Case of Hematemesis in an Infant.

Notices to Correspondents.

Communications to the London Editor should be addressed to 20, King William-street, Strand; to the Edinburgh Editor at Maclachlan and Stewart's, South Bridge; and to the Dublin Editor, at 3, Lincoln-place.

Every MS. should bear the Name and Address of the Sender.

All Contributions are attentively considered, and unaccepted MSS. are returned on receipt of stamps for postage; but the Editors cannot be responsible for any accidental loss, nor can MSS. or replies be delivered on personal application.

Contributions should be *legibly* written, and only on one side of the paper.

When proofs are forwarded it is of the utmost importance that they should be corrected and returned without delay.

Communications respecting Hospital Reports should be addressed to "Editor of Hospital Reports Department," London, Edinburgh, and Dublin, respectively.

ERRATA.

In the report of Mr. Richardson's case of Stricture of the Urethra, in page 19 of our last number, for *critical* read *cortical*, and for *tasa* read *Nasa*.

In our report of the Address delivered by Dr. Butcher before the Surgical Society of Ireland, in the 16th line of the 20th page of our last number, for *good* read *fixed*.

BOOK RECEIVED.

Lectures on the Study of Fever. By Alfred Hudson, M.D., &c. 8vo. Dublin, 1867.

CLINICAL LECTURES
DELIVERED IN
STEEVENS' HOSPITAL,
TOGETHER WITH
OBSERVATIONS ON PRACTICAL MEDICINE.

By Sir HENRY MARSH, M.D., Bart.
PHYSICIAN IN ORDINARY TO THE QUEEN IN IRELAND.
Edited by J. STANNUS HUGHES, M.D., F.R.C.S.I.
PROFESSOR OF SURGERY IN THE ROYAL COLLEGE OF SURGEONS IN IRELAND; SURGEON TO THE LORD LIEUTENANT'S HOUSEHOLD.

(Continued from page 536, vol. ii, No. 48, 1866.)

OBSERVATIONS ON THE TREATMENT OF THE DIABETES MELLITUS.*

SINCE the publication of Doctor Rollo's Treatise on the Diabetes Mellitus, this disease has been investigated with more than ordinary attention; and, though no absolutely curative plan of treatment has as yet been discovered, still considerable progress has been made, and the disease has lost somewhat of its hopeless and intractable character. Much was expected from Dr. Rollo's mode of treatment by animal diet; the efficacy of which was, at first, scarcely doubted. However, like other remedies which have, for a time, been high in public estimation, it has lost much of the character it had acquired; and will be found, I fear, greatly to disappoint the expectations of those who are disposed to place much reliance upon its virtues. An exclusively animal diet may, no doubt, and often does, alter considerably the sensible properties of the urine, and materially diminish its quantity; but even with the few who can endure, and will submit to such a restriction, it will be found to effect but little towards the removal of the disease. A partial adoption of this regimen will, however, be useful, and much merit is undoubtedly due to Dr. Rollo, not only for his discovery respecting the change produced in the saccharine urine, by a total abstinence from vegetable matter; but also for the valuable light which his labours have thrown upon the nature and treatment of this terrible malady.

Amongst the remedies hitherto employed, opium, in very large doses, ranks highest; it possesses the property of checking and restraining the flow of urine, and depriving it of many of its morbid qualities. Its effects, however, are of a transient nature; when the medicine is withdrawn, the complaint recurs; it may again and again check its progress, but the tendency of the disease towards a fatal conclusion will not, I apprehend, be ultimately prevented. A permanent cure of the diabetes mellitus has rarely been accomplished.

A perfectly successful mode of treatment yet remains to be discovered. Every step which is made towards the attainment of this desirable object, is in itself valuable, and may also lead to still further advances; till, at length, we may become possessed of the ability to rescue a considerable proportion of those who are affected with the disease, from a lingering and miserable death.

A well-marked case of the diabetes was, not long since, placed under my care. From the wish to afford all possible relief, I anxiously referred to every source whence useful information might probably be derived, and was thereby led to an attentive perusal of the several treatises and detached cases of this disease, which have, from time to time, appeared. In the works of the older writers, little, if any valuable matter respecting the treatment will be found; indeed, until the period at which Dr. Willis made the curious discovery of the existence of sugar in diabetic urine, all the recorded histories of this complaint are marked by vagueness and uncertainty; and are as applicable to any form of diuresis, as to that in which the urine is saccharine. While employed in turning over the several works written on this subject, my attention was particularly arrested by the following important considerations: First, in many of the cases whose histories are recorded, the earliest disturbance in the general health could distinctly be traced to some cause acting upon the skin, and producing derangement of its functions. Secondly, *every* case of the diabetes mellitus is accompanied with a peculiarly morbid condition of the skin. In truth, I know not any disease in which this symptom is so uniform and so remarkable. Thirdly, none of the remedies employed produced the slighest beneficial effect, until the skin began to relax, and a sweat to appear on the surface.*

These considerations led me to turn my attention more particularly to the state of the skin, and suggested the probability of advantage arising from the application of *vapour* to the whole surface of the body. The vapour bath was employed. The impression made upon the disease by the frequent use of this remedy surpassed my expectations. Its salutary effects, in giving a new action to the skin, were immediately perceptible. The perspiration having been afterwards maintained by warm clothing, and continued bodily exercise, the patient daily improved in health; and at length quitted the hospital, under the conviction of his disease being wholly removed. Before entering upon the particulars of this case, I shall briefly state two observations obtained, the one from Dr. Rollo's book, the other from a treatise written by Dr. Latham. These observations appear to me peculiarly important; as, in both instances, the only operative remedies were those which established upon the surface an abundant perspiration. In the first, the effect was produced by the tepid bath; in the second, by bodily labour. To these facts an additional value should also be attached, because, unwarped by any theory, they are simply and as it were accidentally stated.

In the second edition of Rollo on Diabetes, p. 183, there is a communication from Dr. Gerrard of Liverpool. In the case given by Dr. G., the first observable symptom was a diminution of habitual perspiration; afterwards it totally ceased; and at length "the cuticle became unnaturally dry, harsh, and rough, and to all appearance dead, and incapable of perspiration, absorption, or any kind of transmission." With this state of the skin was connected the ordinary symptoms; thirst, increased appetite, languor, debility, and saccharine diuresis.

In the sole view of determining, by experiment, the existence or non-existence of cutaneous absorption, this patient was immersed, every successive or alternate day, in water raised to a pretty high temperature; the weight of his body having been carefully ascertained, both before and after each immersion. An attempt was made to restrict him to animal diet: medicine of every kind was intentionally withheld. The warm bath was first used on the 12th of February. On the 22nd, there was a considerable diminution of the quantity of urine; its smell was urinous, and the extract less sweet; the weight of the body was increased, and it was observed, the dead cuticle began to come off.

24th. On this day he used the bath at the temperature 100°, and remained in it fourteen minutes.

* Dublin Hospital Reports, vol. 3, page 431, 1822.

* See two cases of Diabetes treated by opium. *Transactions of the London College of Physicians*, vol. iv. In case I. it is stated, p. 198, that the "opium produced considerable perspiration, and on the following morning the urine was no longer sweet. The patient had felt great relief from languor since the opium had been resumed." In Case II. p. 208, it is observed that, "during the period in which the dose of opium had amounted to ten grains (taken four times in the day) the patient had perspired profusely, had been sleepy and giddy, but had suffered no other inconvenience; the urine had a natural appearance and odour, and yielded a very considerable extract." A case is recorded by Dr. Darwin, in which opium produced salutary effects, at a time when it caused the patient so to sweat, "that large drops stood on his face, and all over him." Another case is mentioned by the same author, in which a course of astringent and tonic medicines did not in the least benefit the patient. Opium was at length given; it excited profuse perspiration, and great relief ensued. Emetics have been useful, so far as they have been effectual in determining to the surface. The Hepatized Ammonia has also had the effect of promoting perspiration. Antimonials, when effectual in exciting diaphoresis, have likewise been found useful. Blood-letting and the warm-bath are valuable remedies, and their utility will be found proportionate to the power they possess of re-establishing the functions of the skin. See Watt on Diabetes, pages 27, 28, 29, 36, 38, 151, 152, 155.

25th. "The dead cuticle is peeling off; and he is obviously improving in every respect, and gaining weight." Bath continued at the same temperature, and employed every day till the 20th of March.

For several days, at the beginning of March, he lost ground, in consequence (as I conceive) of considerable disorder in the stomach and bowels. During the continuance of this derangement in the functions of the abdominal viscera, the cuticle did not come away as before, nor did the patient sweat. On the 21st of March, the non-existence of cutaneous absorption having been satisfactorily proved, the warm bath was laid aside.

28th. "He has had a considerable and general perspiration last night; his thirst and appetite are moderate, and he is quite free from pain." At this time the disorder of the bowels appeared to subside; the functions of the skin became more natural; and he began evidently to gain ground.

April 7th. He used the warm bath to cleanse his skin, when a large quantity of the dead cuticle came off. Cold bath ordered.

8th. Urine four pounds thirteen ounces; it is not sensibly sweet. He felt very warm and comfortable after the cold bath, and rested well at night; his appetite and thirst are moderate. He was now a second time thrown back by disorder in the digestive organs; but soon afterwards he began again to improve.

29th. Urine three pounds three ounces. "He had a copious perspiration in the night, which continued about four hours."

May 1st. "He perspired much in the night, but it does not weaken him."

6th. On this day it was discovered, that the patient did not adhere to the plan of animal diet longer than the first fourteen days. During the remaining (as is distinctly stated by the author himself) "he partook, with the other patients, in the common mixed diet of the house."

17th. "Urine four pounds ten ounces; it is neither sweet, nor in any over proportion to the fluids taken in; nor will it ferment, although he has lived chiefly on vegetable matter and milk, since the 6th instant. He has had copious perspirations these two nights past."

25th. "He was discharged from the Infirmary, to all appearance cured of the disease; which, to his own thinking, has long been the case; and to the opinion of his being *even cured*, I have no hesitation in subscribing."

This case, the details of which are in Dr. Rollo's book, possesses peculiar value. Medicine was not administered; nor was animal diet, except during the first fourteen days, adhered to;* and yet there is here presented to us as perfect an instance of recovery as any on record. To what then is the cure of this patient to be ascribed? Not certainly to a few days adherence to animal diet; for it was nearly three months after the exclusively animal regimen had been laid aside (and at a time too, when the diet was chiefly vegetable) that the most marked and decided amendment of the symptoms was manifested. Since, therefore, no medicine was given, and little, if any effect, can justly be attributed to the short restriction to animal diet, it obviously follows that the warm bath (which was not used as a remedy, nor was its efficacy in the least suspected) was, in reality, the one and only efficient means of cure. This opinion is likewise corroborated by the fact, that, in the same proportion as the morbid cuticle was detached, and abundant perspiration established, so did all the symptoms of the disease subside. The second observation derived from Dr. Latham's book, I shall quote in his own words:—*

"The first case I remember to have seen, was in the Radcliffe Infirmary at Oxford, under the care of the late Dr. Parsons, then Clinical Lecturer in the University; the impression of its being an incurable disease, which the medical pupils received from the Professor, was sufficiently fixed in their minds by the inefficacy of the remedies which were from time to time prescribed for the patient's relief; worn out with expectation, and despairing at last of receiving any benefit, he was at his own desire put upon the list of out-patients, and requested to come occasionally to the Infirmary, that the pupils might have the opportunity of seeing the progress of the disease, rather than with any expectation of a prosperous issue to the complaint: a few weeks elapsed before he returned to us, and to the great astonishment of all we found him improved, not only in his appearance, but also very materially in the urinary discharges. His own account was, that, weary of life, and destitute of every ray of hope, he had wandered about, as well as his strength would allow him, for a few days amongst his fellow-labourers of the neighbourhood, and finding, from this exertion, that his strength did not decrease, he was tempted to take a part in the work that was going forwards; that a copious perspiration very soon ensued, under which he did not feel himself weakened in bodily powers, but rather improved in spirits; that he renewed the same sort of easy occupation from day to day, with the same comfortable event; and that at last not only his spirits but his bodily strength was manifestly increased; his urine, however, was then neither perfectly natural in smell or taste or quantity, although in all these respects it was certainly much amended. He visited the Infirmary a few times afterwards at irregular intervals, and at last ceasing to attend, we concluded, from the progress made towards recovery, whilst he continued his attendance, that he probably had been fortunate in experiencing a cure. And had we been then as convinced of the efficacy of animal food in diabetes as we now are, we should probably have thought that the provincial diet of that district might possibly have contributed to his relief, for the poorer sort of labourers usually lived upon a large onion with fat bacon, and no great portion of bread." I fancy the reader will be disposed rather to attribute the amendment in the state of this patient's health, to the free perspiration caused by bodily labour, than to the large onion, or even the fat bacon.

I shall now proceed to relate the principal facts of the case of the diabetes mellitus, which I have lately had under my care; and which strongly illustrates the value of those remedies, by which a copious and continued diaphoresis is most certainly produced.

—— Riddal, æt. 20, a shoemaker; hair and eyes dark; conjunctiva clear and pearly; lines of the muscles distinctly marked; complexion sallow; emaciation extreme; veins prominent and full; skin a dingy yellow, permanently arid, and glued apparently to the subjacent muscles; gums ulcerated; a small unhealthy ulcer on the right cheek; epigastrium tumid; tongue florid at margin and point, and covered in other parts with a thin whitish secretion; extreme listlessness, languor, and debility; a sensation of weakness (referred to the knees) so great, that it is with difficulty the weight of the body is supported; dimness of vision; sleep broken and disturbed; he is much distressed during the night by spasms in the lower extremities; though constantly placed before a large fire, a sensation of creeping coldness is always present. Appetite inordinate; thirst unquenchable; mouth clammy; digestion rapidly performed; a craving sensation recurs soon after food has been taken; costiveness; there is a constant desire to pass water, which is increased during the night. From twenty to twenty-two pounds of urine are passed ordinarily during the twenty-four hours; the bubbles remain on its surface; it is limpid and almost colourless; its smell peculiar, and not easily to be described; its taste very sweet; when

* It is scarcely credible to what a degree an exclusively animal regimen is loathed by the diabetic patient. Dr. Gerrard in the narrative of the case referred to in the text, whilst expressing his disappointment at being deceived by his patient, speaks of the "irresistible propensity to more or less of vegetable diet, as one of the characteristic symptoms of the disease." (P. 223). So prone are such patients to practise deception in this matter, that the adoption of the animal regimen, during even fourteen days, seems to me more than questionable. My patient deceived even those in the ward with him; and devoured, in secret, the skins of potatoes, and every vegetable substance he could lay hands on. The loathing of animal food is so very constant a symptom, that there arises from this circumstance alone an insuperable obstacle to the cure of the disease by animal diet.

* See Latham on Diabetes, p. 130.

evaporated there remains an abundant extract resembling coarse brown sugar; pulse 88, full and throbbing; neither cough nor dyspnœa; such were the symptoms which manifested themselves at the time of his admission into hospital, which was towards the end of the month of December.

I obtained from him the following account of the state of his health, previously to the time of his admission: In the beginning of last November, he embarked at Liverpool, in a vessel destined for Dublin. He was then in perfect health; a violent storm came on; the loss of the vessel was hourly expected. He was four days at sea, and during the greater part of that time was to his knees in water; he was chilled with cold; and for the last two days there was not any supply of provisions. After quitting the vessel, he felt himself constantly chilly, and could not by any means (to use his own expression) "get warmth into him." A thirst so intense came on, that he was perpetually swallowing large draughts of water; he preferred cold drinks. In describing the symptoms, he dwelt a good deal upon an unusual dryness of the skin, and a total absence of perspiration, since the time of his sea voyage; his sight also grew dim; his bowels were costive. In consequence of the excessive keenness of his appetite, his complaints became a subject of ridicule; languor and debility, notwithstanding the large supplies of food, daily increased; and at length he found himself so weak, that he was obliged to abandon his ordinary occupation, and make the best of his way to town to seek relief.

On the first of February, ten ounces of blood were removed by the lancet; the serum was milky; the crassamentum firm; the loss of blood did not in any manner affect the symptoms. From this time, on to the 2nd of March, mercury was used, externally and internally, in large quantities; no fetor of the breath, no increased secretion of saliva, nor any other symptom indicating the presence of mercury in the system, was perceptible. Only whilst using that medicine, he evidently lost ground and became, by degrees, so very weak, that he was no longer able to leave his bed. His bowels were regularly evacuated by doses of castor oil and tincture of senna. His diet was chiefly vegetable; his ordinary drink the inf. lin. and water.

On the 2nd of March the vapour bath was used for the first time. No very perceptible effect was produced. This remedy was repeated on the 9th, 12th, 16th, and 26th. The symptoms still unabated: there was, perhaps, some slight accession of strength.

From the 2nd to the 27th of April, all treatment, except daily purgation, was laid aside. The flow of sweet, and almost colourless urine, in the course of the day and night, often exceeded twenty-four pounds. The necessity of assuaging his thirst, and voiding his urine, was so continual during the night, that he could scarcely obtain any sleep. He was now reduced to a state of alarming debility. On the 27th of April, he was again placed in the vapour-bath; half an ounce of the tincture of opium was mixed with the water which was to be converted into vapour. He remained in the vapour-bath twenty minutes. On being replaced in bed, syncope came on, from which he recovered very slowly; he then became feverish and hot; at length the skin gave way, and the whole surface of the body was soon covered with sweat. He felt, he said, immediately relieved; and on the following day was much better.

On the 4th of May, he was again put into the vapour-bath, to which the tincture of opium, as before, was added. There was not, on this occasion, any tendency to faintness: it excited copious perspiration, and he had a sound and refreshing sleep.

On the 10th of May, the following note was taken of his case: Strength improves daily; he feels much less languid; skin soft and perspiring; pulse 88; a whitish secretion covers the tongue; appetite less craving; improved sleep; he grows fat; gums continue ulcerated and sore; and the ulcer on the inferior maxilla is still open.

May 18th. The urine, almost colourless and very sweet, amounted during the preceding day and night, to full twenty-four pounds. His thirst was very urgent. His weight on this day was seven stone ten pounds.

May 22nd. A temporary diarrhœa, with griping pain, was produced by repeated doses of the colocynth pill. The urine, during the increased action of the bowels, was observed to assume an amber colour, and to acquire a urinous odour, to be much diminished in quantity, and to have a taste less sweet. The tongue was cleaner; the fæces yeasty; the mouth parched; no perspiration; skin very itchy.

May 30. Urine, though more amber-coloured, amounts to twenty-one pounds; pulse 100; no perspiration; an exclusively animal diet, with lime-water and milk, had been for some time enjoined: the patient, however, devoured in secret whatever of vegetable food he could procure; he said that much meat at a time lay heavy on his stomach, and greatly oppressed him.

June 3rd. A remarkable change in the symptoms was observed; for the last twenty-four hours the urine did not exceed eight pounds; during the preceding day and night perspiration flowed generally and profusely; there was a great accession of strength, and diminution of thirst and appetite. The abundant and continued sweating was produced by laborious exercise, while the body was enveloped in thick flannel, and the weather unusually warm. The first efforts at bodily labour were difficult and reluctant. The patient in the morning, when commencing the work of the day, could hardly move his spade; he was, however, prevailed on to persevere: by-and-bye he began to work with more ease to himself; and before the close of the day, when perspiration was fully established, the labour was easy and the fatigue trifling. From this period to the beginning of July, medicine of every kind was abandoned. He worked very hard every day; was warmly clad, and sweated much. His food was principally vegetable; he daily gathered strength and weight; enjoyed sound undisturbed sleep, and felt himself so far relieved, that he was resolved to return immediately to his home and former occupation. From the slightly saccharine taste of the urine, and the continued ulceration of his gums, I strongly urged that he should not yet remove himself from medical superintendence.

July 27th. Bowels costive; urine sweet, light-coloured, and moderate in quantity; tongue much cleaner; free perspiration; he rose but once during the night; thirst, though much abated, continues; weight eight stone thirteen pounds. For several days past he had ceased to work; the vapour-bath has not been used, nor any medicine given; a perspiring state of the skin, however, has continued.

August 4th. He has been for some days restricted to a diet exclusively animal; he has adhered strictly (as far as I could learn) to the regimen prescribed; his ordinary drink was milk with lime-water and beef-tea; the weather was very warm, and the patient's body entirely enveloped in thick flannel. An itchy, slightly-elevated, pale-red eruption was thickly and universally diffused over the surface of the body. His pulse beat steadily 120 strokes in a minute, and was throbbing and full.

August 10th. Pulse still 120. Diet consists in eggs, beef, mutton, soup, and milk. The serum of blood taken yesterday from his arm was white, like milk; sixteen ounces of blood were at that time removed; his strength, by this evacuation, was not in any degree impaired; the pulse fell to 104; perspiration continues; urine, within the last twenty-four hours, has amounted to eight pounds; the taste not sweet; the colour a deep amber; sleep natural. This day he complains of thirst, which has not been the case for several days past.

On the 12th of August, after a meal of fat meat, he was seized with severe vomiting and retching, and spent a feverish and restless night. On the following day, the pulse throbbed strongly, and rose to 120; he loathed food of every kind, had intense headache, panted for breath, and seemed like one suffocating. Fourteen ounces of blood were removed; the appearance of the serum was altogether altered; it was now perfectly transparent, and had a slightly greenish tinge; those urgent febrile symptoms he attributes to the animal regimen, from which he had not for some days deviated. He said

that fat or rich meat particularly disagreed with him. Urine slightly saccharine; much more deeply coloured, and considerably less abundant; skin thickly covered with an eruption of the same nature as that already described. The dyspnœa was so urgent that it gave to his countenance an expression of wildness. He was very restless, and continually changed his position. His skin was intensely hot. The flannel dress was laid aside, and he lay uncovered, except by a single sheet. His thirst was not to be appeased, and his appetite was wholly extinguished; the epigastrium was tumid and painful. By pressure at that region of the abdomen, the dyspnœa and suffocative sensation were very much augmented. Leeches were frequently and numerously applied at the epigastrium; the bowels maintained in a lax state by the daily exhibition of purgatives, saline draughts repeatedly administered, and opium, in large doses, given at night. After each application of the leeches, the respiration became freer and easier. In a few days, the febrile symptoms subsided, and left him weak, languid, and emaciated. The rapidity, however, with which he regained health, and strength after the cessation of febrile action, was remarkable: his skin continued soft and moist, but not profusely perspiring; his pulse did not rise beyond eighty in a minute; his sleep was undisturbed; his appetite moderate; and there did not remain any inordinate thirst. The quantity of urine varied from six to eight pounds, during the day and night; it was rather light-coloured; the taste salt and slightly sweet; he weighed eight stone four pounds. Under these circumstances, towards the end of the month of September, he quitted the hospital. I saw him on the first of January, 1822. There was not any return of the symptoms; the skin retained its natural and softened feel; he weighed eight stone five pounds; his pulse was moderate; the expression of his countenance very much improved; though not exempt from thirst, it gave him no annoyance; his tongue was whitish; he felt strong, and alive to every enjoyment; he worked at his trade as a shoemaker, from an early hour in the morning, with little intermission, until late at night; his diet consisted of bread, butter, occasionally meat, fish, potatoes and gruel; the gums were very slightly ulcerated; the bowels, without medicine, were daily evacuated; the general quantity of urine, in the course of a day and night, varied from six to seven pounds; taste salt, slightly saccharine; colour still paler than natural.

Such are the leading facts which belong to this case. I regret that the specific gravity of the urine was not at any time ascertained, and that this fluid was not, during the progress of the disease, subjected to chemical analysis. Attention to these points would have rendered the history of the case much more complete. Such as it is, however, it exhibits, in a striking point of view, the powerful effects of copious perspiration, produced by the vapour-bath and muscular exertion, in controlling and restraining the symptoms of the diabetes. That many have attempted the cure of this disease, by diaphoretic remedies, I am well aware; but the attempt has been made rather through the medium of medicines taken into the stomach, than by means of remedies designed to act directly upon the skin. That internal remedies should have failed is not surprising, when we consider that the constitution of a person labouring under this affection will resist the action of the most powerful medicines, even when exhibited in the largest doses. It is singular to what an extent opium, antimony, and other drugs may be administered, and yet little or no effect be produced. The warm-bath has been used—but it has been used only occasionally; it has been employed as a secondary remedy, as one of minor importance, and not as one, which, if properly managed, is of itself sufficient to effect a cure. Its daily employment for weeks, nay months, may be requisite to bring about that relaxed and freely perspiring state of the skin, without which, whatever temporary abatement in the symptoms, or diminution in the flow of urine, may have taken place, not one step has, in reality, been made towards the accomplishment of a cure.

(To be continued.)

Original Communications.

CASES OF INTESTINAL OBSTRUCTION,

ILLUSTRATING THE VALUE OF OPIUM AS A REMEDY.

By W. H. SANDHAM, M.R.C.S., Cork.

(Read Before the County and City of Cork Medical and Surgical Association.)

Mr. F———t, æt. 20, healthy constitution, residing four miles out of Cork, suffered two months since from intestinal obstruction; it yielded to ordinary treatment in about thirty-six hours. *Second Attack.*—At 4 o'clock A.M., on 3rd December I was again sent for, and found him after taking a cup of salts and senna and a large dose of castor oil without any purgative effect. He complained of pain at the head of the colon and vomiting. There was no hernial tumour nor other systemic disturbance; pulse soft, full, and 80. I administered a large turpentine and assafœtida enema; left him two pills, cal. gr. iij., opii gr. j., to be taken every four hours, followed by a glass of salts and senna mixture every hour; of this he drank 8 oz.; no effect. Friday 4th, ten A.M. Still in pain; bowels above the obstruction tympanitic; tenderness limited to seat of obstruction. Gave three drops of croton-oil, two turpentine, and one tobacco injection this day. I remained with him this night. At 1 o'clock, being still in pain and rejecting everything, I determined on giving up purgatives by the mouth, and adopt the soothing plan; pulse, tongue, and heat of skin were normal. I put him on poppy stupes and 2 grs. of opium every two hours; vomiting and pain ceased immediately after second pill. I then put him on 1 gr. of opium every three hours. Saturday, 5th. No vomiting and little pain; system undisturbed; used large enemata morning and night; continued opium. Sunday, 6th. About two o'clock this morning he complained of inability to micturate, and his father becoming uneasy called in Dr. Edward Townsend. I preceded Dr. Townsend, and administered a large enema through an asophagus tube with a stomach pump. He passed water without catheterism. Dr. Townsend added to my opium pill 2 grs. of calomel every three hours. Immediately after taking the second pill severe bilious, almost black, vomit set in. At my evening visit, 8 P.M., I omitted the calomel, and put him again on opium alone; *vomiting at once ceased;* used enema nocte-maneque. Monday, 7th, 8 A.M. Found him tranquil, and pulse full, soft, and 74; not much abdominal tenderness, but tympanitic to such an extent as to define the transverse colon and stomach; gave large enemat; in fact pumped away until he could contain no more, when mechanical distension alone caused it to pass off; no effect. At half-past four P.M. Dr. Townsend and I administered enemata as before, and added two grs. of aloes to the opium pill every three hours, and a glass of salts and infusion of roses, alternating with pill; to be stuped often, and have fowl broth and arrow-root; took some of the pills and most of mixture; no effect. Tuesday, 8th, nine o'clock A.M. Dr. O'Connor and I saw him, Dr. Townsend being feed off. I regretted the loss of Dr. Townsend, but was pleased his successor was a man of such large experience. We administered a copious enemat, containing turpentine, oil, assafœtida, soap, and common salt, and to the opium and aloe pill of Dr. Townsend and myself, we added one-twelfth of a grain of strychnine every three hours. Six P.M. I saw him; used usual enemata, and continued pills. Up to this no systemic disturbance whatever; pulse 64. Wednesday, 9th. Tranquil; no vomiting; considerable tympanitis; enemas, stupes, &c., as before; ceased pills and ordered half oz. castor-oil and twelve m. tinct. opium every three hours; took them through the night; had a good night, and towards morning three liquid stools, like portions of the injections. Thursday, 10th. Dr. O'Connor and I concluding the bowel was about to resume its functions, omitted enemata, but con-

tinued oil draught, two in the day. Dr. O'Connor feed off. Six P.M. He took the two oil draughts ; no alvine effect. I gave him a large soap enemat, and he passed some scybalous matter, small in amount ; two oil draughts during night. He this evening craved for food, and said he "felt satisfied some change had taken place." His abdomen was still very tympanitic, and whatever there was of tenderness was now over the signoid flexure of the colon, in the groin opposite that first pained. Friday, 11th, A.M. Three liquid stools ; had fine night. To have tea and toast, beef-tea, arrow-root. Is in good spirits; swelling and tympanitis better. Six P.M. Had two feculent discharges, but none since taking sedlitz powder at three o'clock ; gave soap injection. He passed a large quantity of broken down fæces, complains of painful tenesmus, eats with a liking ; region of stomach and transverse colon still tympanitic ; no pain on pressure anywhere over abdomen. Saturday, 12th, ten A.M. Good night ; took sedlitz powder at six A.M., followed by two satisfactory stools; gave soap enemata, followed by another satisfactory result ; feels much better ; tympanitis greatly abated. Sunday, 13th. Better ; another enema satisfactory. 15th. Soap enema again satisfactory. Feed off.

Mr. F——t's Third Attack.—On the 18th of February, 1865, again called in. Dr. O'Connor was four days in attendance, and during that period he used cal. and opium, salts and senna mixture, stupes and enemata, without effect. We agreed to treat him on the same principle as on the second attack—namely, avoiding purgatives by the mouth, and administering grain doses of opium every four hours, with copious enemata nocte-maneque ; this treatment was followed with the same satisfactory results as before, so far as keeping vomiting and systemic disturbance quiet. Morning and evening copious enemata were given, until the 28th, when he had two encouraging stools ; pulse tranquil, and 80 ; all through it kept steadily 96 to 100. Notwithstanding the continuance of opiates no symptom of narcotism presented. There was a marked difference between this and the second attack, in the remarkable absence of pain and tenderness. He had a sense of oppression from tympanitic distension, which was very great, but nothing more throughout ; thirst was often urgent, and tongue brown and parched ; lived on fowl broth all through.

March 1st. This morning his bowels acted freely without enemata, and in consequence Dr. O'Connor and I were discharged. The father was physicking him for three days before Dr. O'Connor saw him, so that the obstruction this time continued *nineteen days*—the second attack *fourteen days*. Such attacks as those now read most practitioners of any standing present must have met, but the history of three attacks on the same person must even interest such; but I have been induced to record them especially for the information of the students, who, I am glad to see, attend the meetings of our Society in large numbers. The second attack is a remarkable one; and the third is in every particular like it—first, for its obstinacy, never yielding a jot for twelve days ; second, for the number of injections administered, in all about thirty—at one time consisting of turpentine, oil, and assafœtida ; at another, soap suds, soap suds and salt, and even tobacco, cal. and opium pills to ptyalism, croton oil bolus, croton oil by itself, senna and salts, salts and infusion of roses, pills of opium and aloes, opium, aloes, and strychnine, castor oil draughts to the number of twelve, and from one o'clock A.M. on Friday, 4th, to Sunday, 13th, he took opium every three or four hours in doses of two grains, one grain, or the minimum, half a grain, throughout nine days and nights without one symptom of narcotism being induced. It was remarkable—*once he was put on opium*—how little the constitutional or systemic disturbance. Any medical man looking at him in bed, and examining his pulse, would at once tell the boy to get up for he had no illness. Dr. Watson, in his "Lectures on the Principles and Practice of Medicine," page 463, says:—"I know of no cases of disease more painful to witness or to treat than those which result from invincible obstruction of the intestinal tube ;" and, again, page 467—"It is to these circumstances of irremediable disease that *opiates* are eminently adapted." Every practitioner present knows well how painful it is either to witness or treat obstinate intestinal occlusion. But the history of the preceding incontrovertibly proves that opium is invaluable even in remedial cases—the persevering use of opium I look upon as the salvation of my patient, Mr. F——t, who, I am happy to say, is hearty and strong this day.

One word about calomel in ileus. I am strongly of opinion calomel is entirely contra-indicated once you are satisfied the bowel is constricted or obstructed, no matter from what cause. I think calomel does positive mischief, and in this way : you administer a scruple—ten or five grains as a purge at first ; it fails to purge or pass per anum. It is then given every three or four hours, combined with opium. It is accumulating in the system, and what organ does it stimulate or seize on? The liver. Its secreting powers are increased, or the gall-bladder and its ducts stimulated ; bile is poured out in large quantity ; this bile cannot pass the obstructed bowel, and nature gets rid of it by vomiting ; in fact, violent anti-peristaltic action is induced, and the patient thereby suffers intensely—this being invariably what I have witnessed whenever calomel was administered. Unless my mind changes much, I will in future oppose the giving of calomel in constricted or obstructed bowel affections after it has failed as a purge. To the young practitioner I would say—while there is life there is hope ; never part your patient until death snatches him from you, for in many cases—like the attacks just read—your patience and perseverance will be crowned with success.

I forgot to mention that during the last attack, on two or three occasions I tried electricity (the interrupted current), but without effect. Dr. Watson, before quoted, writes, page 465—"The intestines may be torpid and insensible to ordinary stimuli, and really require strong rousing. Dr. Abercrombie mentions the case of a gentleman whose bowels were locked up by an accumulation, as the result showed, of black, hardened fæces. The obstruction, which had resisted the most active purgatives, and was accompanied by an evident and painful distension of a part of the abdomen, yielded *at once* to the repeated application of galvanism to that part. Each application was *immediately* followed by a copious evacuation. Here the flagging muscular action was restored apparently by the galvanic stimulus.

From my experience of this remedy, I would deserve censure did I omit its use in future cases. When you have want of power or a semi-paralysed state of the muscular coat, I think it a stimulant and anti-spasmodic likely to induce active peristalsis. We can see before our eyes some of the effects of certain currents of electricity when made to traverse voluntary muscles in the human subject, and in frogs, &c.; but what effects should follow the same currents applied to muscles supplied by the sympathetics alone, I fear we are as yet ignorant of, and to this ignorance of the proper current to use, and the best direction to pass it, I attribute the want of success in such cases as those I have read ; but I think the day not far distant when this knowledge will be arrived at.

REMARKS ON CHOLERA AND ITS TREATMENT ; WITH CASE.

By G. KINLOCK H. PATERSON, L.R.C.P., L.R.C.S.Ed., &c

The articles on cholera in The Medical Press and Circular, during past months and recently, show that the profession are far from being at one in regard to the nature and cure of it, nevertheless in the discussions respecting which it will be admitted that there has been and still is shown very great ability, with much effort and earnestness, to relieve and cure as many of the affected, as possible, also a noble and kindly sympathy towards sufferers from cholera wherever it has made its appearance. It is but justice to acknowledge these public services for the relief of our suffering humanity. Perhaps at no time before was there ever so much written

about this epidemic as in 1866, both in our own country and abroad.

Bleeding in cholera—that is to say, in young and stout persons affected with cholera—if done early, ought to find not a few supporters for its use.

In 1849, when the cholera was in Dundee and Carse of Gowrie, I tried bleeding as a remedy to a small extent, in the early stage, with success. Also, I generally used the tincture of opium, although at other times I gave to some who were of delicate constitutions, and after being seized with vomiting, purging, and cramps, then tincture of the sesquichloride of iron, or steel drops; good results following from both. Evidently it is in vain, as far as I have seen, to look for any one remedy to suit all cases or stages of cholera. Those affected will, in my humble experience, always have most chance to recover when the means are early and properly adapted and adjusted to their individual conditions, and expertly applied, especially before their strength begins to fail from the progress and effects of the disease.

All my successful cases of cholera in 1849 were in the early or first stage of it; and I do believe had such not been timeously seen and means applied early, a very unfavourable statement would in regard to the latter have followed.

I am in favour of giving to the delicate, when attacked with cholera, the tincture of the sesquichloride of iron, alternated, if needed, with tincture of opium, in doses according to the severity of the case and age.

Case.—J. D., aged 19, female servant, was on 5th Nov., 1866, suddenly and violently seized with internal abdominal pain in the evening. I was hurriedly sent for; on my arrival found her having symptoms of what some writers call "cholera sicca;" soon afterwards cramps came on, affecting the upper and lower extremities; she complained very much of the latter while they lasted, and, when such had for a little subsided, of the pain in the abdominal region. There was no vomiting or purging.

Speedily I bathed her cramped hands with salted hot water, and kept them stretched out, and put her feet in warm water with mustard; laid a large sinapism over epigastric region, but on account of the pain returning now and then I gave her tincture of nux vomica to the extent of twenty drops, and in about half or three quarters of an hour she had an evacuation of her bowels, after which she began to feel easier, and by next morning she was much better, and did well.

SUMMARY OF SCIENCE.

(Specially Edited and Compiled for the Medical Press and Circular.)

By CHARLES R. C. TICHBORNE, F.C.S.L., F.R.G.S.I., &c.

[The Editor of this Summary wishes it to be understood that he is not responsible for the ideas, theories, or the correctness of statements made in any of the papers quoted in the compilation.]

LATEST VIEWS ON ANTISEPTICS AND CHOLERA CONTAGION, COLLATED FROM VARIOUS SOURCES.

The late epidemic, which seems to have now left our shores, has given us some amount of experience, which will no doubt be of considerable use in connection with contagious diseases generally. The subject of purifiers of contagious or offensive matter has been considerably sifted from a great deal of the chaff which surrounded it. Much of this confusion was, in many cases, due to the ill-advised advertisements, which have the sale of a proprietary article at heart more than the benefit of the community. Perhaps no more difficult subject has engaged the attention of the scientific world than the different phases of contagion, and the destruction of miasmatic effluvia. Before we take leave of it, it may be well to place before our readers a summary of what, at least, is the aspect of this subject at the close of the year 1866, which, in this respect, has been to us an eventful one indeed.

The following have been the disinfectants finally used by the Medical Officers in London:—Carbolic acid and M'Dougall's powder are those specially marked out by the Medical Officers for the parish of St. Mary, Islington. Dr. Gibbon published a separate handbill for the use of carbolic acid and the carbolic powder in the "Holborn district." Sulphate of iron, with carbolic acid, were solely recommended for "privies and water-closets" at St. Giles's. Mr. Lionel J. Beale especially recommends carbolic acid for the disinfection of excreta, water-closets, and clothes.

In the district of St. Mary, Newington, also, carbolic acid is specially recommended for arresting the spread of cholera.

At Oxford some drains and sewers were disinfected by means of carbolic acid during last autumn, and the characteristic flavour of carbolic acid was soon after detected in the drinking water, to the great indignation (says the reporter) of the householders, who would doubtless have preferred the sewage, if undetected, to the flavour of carbolic acid, so easily detected.

That ozone has no effect on the presence or absence of cholera has been shown by Shultze, Voltolini, Du Methe, Lamont, &c. As regards the charcoal boxes recommended for drains, we learn that charcoal does not seem to disinfect or destroy cholera poison. The ships which were employed in transporting charcoal from Constantinople to the Crimea were ravaged by cholera.

Dr. Gibbon, Medical Officer of Health to the Holborn district, has reported to the Local Board of Works that whenever a death or removal of a cholera case occurred, he had instructed the inspector to retain the key of the sick room until every article of bedding and clothing had been plunged into a mixture of boiling water and carbolic acid, and he "considers this method of disinfection more effectual than the somewhat costly one recommended by the order in Council of burning every article."

The Lords of the Admiralty have ordered that the use of Burnett's disinfecting fluid shall be discontinued in the Royal Navy, in consequence of several fatal cases of poisoning having occurred from its having been accidentally swallowed by seamen (Burnett's fluid being a strong solution of chloride of zinc). Carbolic acid is now to be used throughout the fleet.

Dr. Letheby's observations to the Registrar-General in connection with disinfectants may be summed up in a few paragraphs.

Chlorine gas, being a diffusive body, is best suited for the disinfection of places which cannot be reached by other disinfectants. It has been principally used for the disinfection of vaults of churches, &c. *Chloride of lime* was used in disinfecting about two thousand of the worst class of houses, by sprinkling it over the floors, and scattering it about the cellars and yards. Carbolate of lime was used in a similar manner to chloride of lime, but principally where the bleaching action of the latter would be an object. They must not be used together. The carbolate of lime should contain twenty per cent. of carbolic acid. *Carbolic acid* has been used as the sole agent of disinfection for privies, drains, and sinks, and for the sewers of public roads. *Chloride of zinc* is only applicable to the discharges from sick persons, but it is hardly applicable to any other purpose. (Carbolic acid must be the most efficacious for this purpose.—Ed. S.) *Chloride of iron* is used in the same manner as chloride of zinc. Permanganate of potash is only suited for the disinfection of drinking water.

Dr. Frankland writes, as regards the putrefaction of organic matter in river water, and also with regard to the temperature at which putrefaction and decay of organic matter in water takes place, to the following effect, in the case of the Duke of Buccleuch and others *v.* Alexander Cowan and others, recently tried at Edinburgh:—

"Where a river becomes sluggish, as where it is pent up by a weir, the quantity of organic matter, and also of mineral matter, increases, in some cases very considerably; but that is only the case in warm weather, and the temperature of the water must be 55 deg. Fahrenheit and upwards for this effect to be produced. The putrefaction of the mud in

the bed of the river ensues, and the previously insoluble matter becomes soluble."

The safest and most sensitive test of putrefaction in water is the relative proportion of oxygen to nitrogen in the dissolved gases. The river North Esk, as it flowed through the Duke of Buccleuch's grounds at Dalkeith Palace in March and June last, afforded striking evidence of this kind as to the effect of temperature upon the absorption of oxygen by the organic matter of water. It is only when the whole of the oxygen dissolved in water is consumed that the latter assumes a true and putrefactive condition.

On the 31st of March the temperature of the water in the North Esk was 38 deg. Fahrenheit, and the proportion of oxygen to nitrogen in the dissolved gases was O : N = 1 : 2·02. This is the normal proportion in water free from organic matter. On the 21st of June the river emitted a putrid odour; the temperature of the water was 60 deg. Fahrenheit, and the proportion of oxygen to nitrogen was O : N = 1 : 0·25; thus the amount of dissolved oxygen was reduced to a mere trace, and the organic matter was in a putrescent condition.

ON THE ACTION OF GLYCERINE UPON METALLIC SALTS.

Antony Guyard, in a communication to the *Chemical News*, 30th November, 1866, points out certain cases where glycerine has the well known property, possessed in common by many organic substances, of concealing the ordinary chemical reactions. Oxides of nickel and cobalt are very indifferently affected by glycerine, if this substance is added in excess, and if potash or soda is added the whole forms an apparent solution, from which however the largest portion of the oxide is precipitated, simply by destroying the viscosity of the glycerine, either by diluting with water or by warming. Sulphate of alumina, sesquichloride of iron, nitrate of lead, protochloride of tin, are not precipitated by ammonia in the presence of a large excess of glycerine. Alumina, instead of being precipitated in its gelatinous form, will effect the shapes of dense flakes, which collect rapidly at the bottom of the flake, and which, if filtered, can be washed with the utmost facility. This property, the author remarks, will be found extremely useful in the preparation of hydrated alumina ; the process can be slightly modified for this special purpose in the following manner : To the solution of the alumina salt, supposed to be pure, an excess of an acid and of glycerine is added, the whole is warmed, and then precipitated by ammonia.

Per oxide of iron is very soluble in ammonia and glycerine.

ON THE PRESENCE OF PROPRIONIC AND BUTYRIC ACIDS, &c., AMONG THE PRODUCTS FROM THE DESTRUCTIVE- DISTILLATION OF WOOD.

Dr. Anderson has noticed the presence of some of the homologes of acetic acid in the mother liquors of acetate of soda. The butyric and proprionic silver salts were separated and analyzed. The presence of Valerianic acid was inferred.

"ELAND'S BOONTJES."

This substance was analyzed lately by Dr. Attfield. It is a species of acacia, yielding food, medicine, and tan to the natives of South Africa. They extract an oil by boiling, which is used as food. An infusion of the root is employed as a gargle, and also as an astringent in dysentery. The root is also used for tanning, and contains 13 per cent. of tannin. The seeds contain about 30 per cent. The percentage of nitrogen in the kernel is 3·6, and in the integument 1·03. Dr. Attfield says it probably exists in the state of vegetable albumen.

SULPHIDE OF AMMONIUM.

Mr. Spence, in a communication to the Manchester Literary and Philosophical Society, gives the following easy method of manufacturing pure sulphide of ammonium on the large scale :—He mixes soda waste, or gas lime (impure sulphides of calcium), with half its weight of sulphate or chloride of ammonium, and then blows steam into the mixture, and passes the vapours through a condensing apparatus ; the distillate is pure sulphide of ammonium Sulphuretted hydrogen, says Mr. Spence, when referring to an accident which happened in connection with this substance, is most powerful in its effects on animal life, but when combined with ammonia it seems even more active. One peculiarity of it, in both forms, however, seems to be that if you escape with life, it leaves no bad effects afterwards.

The result of Mr. Spence's process is no doubt the production of a hydrate of the monosulphide. There are great numbers of the sulphide all procurable by distilling any corresponding sulphide with a salt of ammonia. The heptasulphide, however, of which there is no corresponding sodium or potassium salt, seems to be the most stable of the polysulphides of ammonia, and is no doubt the most valuble commercial salt.

ON A FATTY ACID, &C., FOUND IN HUMAN URINE.

M. E. Schunck, in two communications contributed to the Royal Society, gives us another instalment towards the catalogue of numerous products derived from the above source. The first is a description of a process by which he separates a fatty acid. The process consists in passing urine, which has already been filtered, so as to separate all insoluble matter, through animal charcoal. The charcoal completely decolorizes and deodorizes the urine: The charcoal, after being thoroughly washed with water, yields a brownish fatty matter on boiling with alcohol. This is further purified by treating with water. This fatty acid has properties characteristic of the group to which palmitic and stearic acids belong. It is white and crystalline ; has a pearly lustre ; melts at 54 degs. C. ; volatilizes unchanged when heated ; and is easily soluble in alcohol and ether. It is also soluble in the alkalies and alkaline carbonates, yielding solutions which froth. The author thinks it is a mixture of stearic and palmitic acid (margaric acid), but the quantity obtained was too small for analysis. How this acid, if a normal constituent of human urine, comes to be dissolved in an acid fluid (urine) is a matter of some interest; the author's researches do not, however, throw any light upon this subject.

In another communication the author says that he procured oxalurate of ammonia from the washings of the above fatty acid. Whether this salt is a normal constituent of human urine or not he cannot say, but its presence, he says, affords an easy and satisfactory explanation of a phenomenon which has, until now, been unexplained—viz., the formation of oxalate of lime in urine, long after its emission. It is, doubtless, owing to the decomposition of oxaluric acid, which takes up water, and splits up into urea and oxalic acid, the latter then combines with the lime contained in urine.

ON THE CONCRETIONS FOUND IN PORK.

M. Virchow has often found in the flesh of pig some concretions which experiments have proved to be formed of crystals of guanine. They are found especially in the cartilage, &c., which surround the knee.

The concretions examined by M. Begemann are not organic. They consisted of a mixture of phosphate and carbonate of lime, which had already been observed. Nothing authorizes us to see in them the remains of trichina cyst.

The author speaks again of concretions observed by M. Leuckart, formed of stearine and palmine. These are developed in smoked meat.—*Journal de Pharmacie et de Chimie.*

NON-EXISTENCE OF CAROTINE.

The red crystals found in the ligneous parenchyma of the carrot, and which have been considered as due to the immediate principals, carotine and hydro-carotine, are, according to MM. Frorde and Sœaur, nothing more than cholesterine coloured by a red pigment.

MM. Frorde and Sœaur also ascertained the presence of asparagine, and, they believe, of bimalate of lime.

Although the supposed carotine yields substitution compounds with chlorine and bromine, which resemble those

obtained by similar means from cholesterine, the researches of M. Husemann, performed some years since (An. Ch. Pharm. cxvii. 200), seem to point to some difference between these products. But there is nothing extraordinary in the presence of cholesterine in vegetable substances, as it has been noted before.

ACTION OF WATER UPON LEAD.

The cause which tends, most, towards attacking lead, when immersed in distilled or rain water, is, according to M. Stalmann, the presence of a small quantity of ammonia. On distilling water the first portions will be found most corrosive. A water containing 0·0015 in 100 is very active. Nitric acid if present renders it equally active. Small quantities of nitrate of ammonia are without influence. The air and carbonic acid have a considerable action upon lead, but when deprived of the presence of air carbonic acid is without action.

MEDICAL GLEANINGS.

(From the British and Foreign Medico-Chirurgical Review.)

ON THE HISTOLOGY OF THE BLOOD-CORPUSCLES.

By PH. OFSIANNIKOF.

Professor Ofsiannikof believes himself to be justified in concluding from his experiments that the blood-corpuscles of most if not all animals possess an investing membrane or proper cell-wall, which reacts differently from the cell contents when exposed to the action of water, serum, and other fluids, and under certain circumstances possesses a remarkable degree of firmness. The behaviour, however, of different corpuscles taken from the blood of the same animal with these fluids often differs considerably. He has observed that the process of crystallization occurs in the cell contents whilst yet enclosed within the membrane, though sometimes this takes place with more, sometimes with less, facility. He alludes to the variety of forms that have been depicted as the result of the action of certain reagents upon the corpuscles, but declares that he has observed nearly all these forms in the corpuscles whilst swimming in blood-serum. He has found the entire substance of the blood-corpuscles, cell-membrane, contents and nucleus, when this last is present, dissolve after a time completely in serum, water, solution of sugar, and in other fluids. Beautiful crystals may be obtained from frogs' blood (but not from the blood of man), treated with solution of sugar mingled with alcohol.—*Bulletin de l'Academie Imperiale de St. Petersburgh, t.* viii., *p.* 561.

ON THE CONSTRUCTION OF A MICROSCOPIC SLIDE CAPABLE OF BEING HEATED, AND ON THE EXAMINATION OF THE BLOOD BY ITS MEANS.

By MAX SCHULTZE.

For the particulars of the construction of Max Schultze's slide we must refer to the original, only observing that it consists essentially of two metal arms, extending laterally, to which the flame of a spirit lamp can be applied. The temperature is ascertained by a small thermometer, and is regulated by the part of the arms to which the lamp is applied. One of V. Recklinghausen's moist chambers is an important adjunct.

In examining the blood, the temperature was maintained at about 100° Fahr. As regards the *white corpuscles*, Schultze found constantly in his own blood and in that of some of his friends, some white corpuscles of smaller size than the red corpuscles, some of equal size, and, lastly, the well-known typical form; in these last the most lively and vigorous movements were perceptible, processes being thrown out which were followed up by the whole corpuscle, exactly as in the movements observed in the Amœbæ. In no instance was he able to determine the existence of a membrane on the surface of these colourless corpuscles, and its absence was also rendered highly probable by the taking up into their interior of certain colouring matters, as carmine and indigo, and of milk-granules. They thus appear to be membraneless cells, and they therefore belong to the same series of cells as the blood-cells of the Invertebrata.

The movements of the colourless cells cease in man after two or three hours at 100° Fahr. If the temperature is much elevated beyond this point they quickly die, but if it be lowered to near 32° Fahr. the movements may continue even for as long as twenty hours.

The *red corpuscles* never exhibited any movements, but when raised to 125° Fahr., at which temperature the white corpuscles were killed, the red underwent a change of form hitherto unnoticed; at first they were unchanged, then indentations occurred at the margins; then roundish fragments, at first with pedicels, detached themselves. The end of all was that in the blood-fluid only small spherical bodies of darker colour remained, the largest being always smaller than an unaltered blood-disc, and the smallest quite a minute granule. Schultze arrives, from his experiments—not only on man, but on the dog, rabbit, calf, and guinea-pig—at the conclusion that the coloured corpuscles of the blood are also destitute of any investing membrane, and he is herein in accord with Rollett and Brücke, but opposed to Ofsiannikof, whose statement has just been given. Schultze found constantly, according to the period of the day, a varying proportion of small spherical red blood-corpuscles, the significance of which is not yet satisfactorily determined. In violent fevers there was a marked tendency in the red discs to become globular.—*Archiv. f. Microscop. Analonin, Band I.*

ON THE EXISTENCE OF A PERIVASCULAR CANAL SYSTEM IN THE CENTRAL ORGANS OF THE NERVOUS SYSTEM, AND UPON ITS RELATIONS TO THE LYMPHATIC SYSTEM.

By W. HIS.

He observes that on examining fine sections of the spinal cord from chromic-acid preparations, &c., it will be constantly found to present fissures which every one must have seen, and which have always been referred to breaking down of the tissue during section. But on attentive examination the fissures will be found to present smooth edges, and to be bordered by a layer of condensed tissue. Their course and division are regular, and the same for all sections made from the same cord. In the white substance they pursue for the most part a radial direction from the grey substance outwards, whilst others commencing at the periphery pass inwards; these are connected by smaller transverse fissures. In the grey substance they are less regularly arranged, are shorter and more angular and closer together, especially at the cervix cornu posterior. They recall the lymp fissures of the testicles and of the intestines. On dipping an injection-needle into a fresh calf's cord, and throwing in some injection, he was immediately successful in filling a canal system, whose arrangement on section exactly corresponded with that of the above-mentioned fissures. The grey substance appeared like a sponge, penetrated by a close network of tubes 1-100‴ to 4-1000‴ diam., and the same appearances were shown in the human cord. The radial direction was very well shown. The calibre of the chief branches diminishes quickly in passing outwards from the grey substance, but opens into a close and narrow network of canals. The whole closely resembles the root network of the lymphatic system; but we will first consider its relations to the blood-vessels.

Close examination shows that every fissure is traversed by one blood-vessel, sometimes lying close to the wall, sometimes free on both sides, and so, on transverse section, each vessel is surrounded by a clear space.* Frommann, who has seen them, attributes these perivascular spaces to retraction of the tissues. The best mode of displaying them is to inject the blood-vessels in the usual way, and then to inject the spaces by sticking the needle in at random into the texture. The arrangement is also well shown by injecting a nitrate of silver solution either into the vessels or perivascular spaces. All modes of preparation show that the perivascular spaces are constant, and not produced by extravasation nor by collapse of the blood-vessels. The calibre of the spaces is two, three, or even four times greater than that of the contained vessel, and there is no bond of connection between the walls of the vessel and those of the circumscribing space.

Appearances similar to those described above are also to be seen in the brain. The spaces are proportionately larger round the larger vessels than around the smaller. His inquires, what relation does this canal system bear to the lymphatics?

Those accustomed to injections will readily perceive a similarity existing between the perivascular spaces and the lymphatics, and in their size and mode of branching, as well as in the absence of an investing membrane or wall separable from the

* See also John Dean Smithsonian. "Contrib. to Knowl.," 1864, pl. v, vi, and viii.

adjoining tissues, and in the difficulty of exhibiting an epithelial lining. Fohmann and Arnold showed indisputably the presence of lymph-vessels in the pia mater, but no one has succeeded in tracing lymphatics into the substance of the brain. Are the perivascular spaces, then, continuous with the lymphatics of the pia mater?

In answer to this question His shows that the lympathics of the pia mater can be injected *from* the perivascular spaces of the brain, and the union is effected by a wide lacunar system separating the brain from the pia mater. He believes there is no question that the perivascular spaces are the lymphatics of these parts of the nervous system. He thinks that, on the one hand, these perivascular spaces act as reservoirs for the nutritious fluids, and, on the other, serve as organs protecting these important parts from pressure, serving the same purpose for each individual segment of the nervous system that the liquor cerebro-spinals does for the whole collectively.—*Siebold und Kölliker's Zeitschrift f. Wiss. Zool.*, xv., 1865, p. 127.

RESEARCHES ON LYMPH AND BLOOD-VESSELS.

By LEOPOLD AUERBACH.

Auerbach remarks that, according to the representations of all modern writers, besides the chyle spaces of the intestinal mucous and submucous tissue, there is a superficial subserous network of lymphatics; these communicate by some straight vessels, which traverse the longitudinal muscular coat obliquely. Whilst these statements hold for the frog and many cold-blooded animals, they are incorrect representations of what is really visible in warm-blooded animals.

There is, no doubt, a superficial subserous network of lymphatics; but this is only visible at the point of attachment of the mesentery, and over a space varying from half a millimètre to six millimètres on either side of it. On the remaining and by far the larger portion of the intestine there is no subperitoneal network. At and close to the attachment of the mesentery the vessels dip through the longitudinal muscular layer to communicate with the deeper stratum of lymphatics.

The elongated network of larger trunks, described by authors as subserous, is in reality situated between the longitudinal and circular layers of muscular fibres, and constitutes only the largest collecting trunks of a very much closer network of lymphatics situated at this level, which, again, is only an offset of a still larger system, that everywhere interpenetrates the muscular tissue, and is in connection with the chyle passages. These lymphatics of the muscular layers he has examined in the pig, calf, rabbit, guinea-pig, cat, and dog. He terms them *interfascicular* capillaries of the lymphatics. In the longitudinal muscular tissue there is usually only one layer of these capillaries, but in the circular layer of muscular tissue there are many layers succeeding to one another. They present the usual characters of lymphatics.

The lymphatics from both layers of the muscular coat pour their contents into a network of larger canals, which is extended between the muscular coats in the same fissure or space as that in which the plexus myentericus nervosus is found, and, indeed, always on the inner side of the latter, crossing its trunks and ganglia. This he terms the *interlaminar* network, and states that it may be very easily shown. The tubes vary greatly in size, from 1·7 to 1·6 mm. in diameter, and the larger ones have valves, and, beginning small at the free border of the intestine, course more or less obliquely towards the attached border, with many dilatations and constrictions.

Chyle is often found in the *interlaminar* network which constitutes a medium of communication between the chyle passages of the submucous tissue on the one hand, and with the canals of the mesentery which carry off the chyle on the other. Yet, however large and spacious the vessels of this network may be, they only carry off half the entire amount of chyle, the remainder being transmitted through the submucous vessels.

As regards the form and arrangement of the latter network of vessels, he has little to add to the investigations of Teichmann, His, and Frey. In the mucous membrane, as well as in the submucous tissue, he notes, however, that he has usually found the lymphatic vessels clearly *tubular*, with the exception of those which surround the base of the follicles.

In regard to the larger vessels which are formed from the *submucous* networks, they *do not*, as is frequently stated, perforate at certain points the muscular layers. They divide into two sets, of which one is his interlaminar network; the other continues in the submucous tissue from the free to the attached border of the intestine, where it perforates the muscular tissues to reach the serous coat and blends with the interlaminar canals. The trunks so formed at once pass to the mesentery. *It thus appears that there are two layers of lymphatic or rather chyle vessels, differently situated as regards the muscular tissues* (which must have a certain physiological significance), one of them passing between the two muscular tissues and one in the submucous tissue.

As regards the finer structure of the lymphatics, he gives a good historical *resume* of the different opinions that have been held on the question of the presence of a distinct membranous wall to the finer lymphatic capillaries, some admitting, some denying it, and maintaining that they are only splits or fissures in the tissue.

In his own observations on the finest capillaries of the lymphatics he could only see for a long time certain cell-nuclei present in great numbers, with a double contour and clear contents, a few fine granules, and one or two nucleoli. He then observed that these were not scattered irregularly, but followed certain lines, and by-and-by that they were adherent to a tubular membrane of perfect transparency, the borders only of which (when seen in profile) were visible. By carefully moving the slide cover he sometimes saw folds in this membrane. These appearances alike proved the great flexibility and independency of the membrane, and showed also that it was not invested by any other membrane. These vessels presented a most striking analogy to the capillary blood-vessels, but their great and varying diameter and the simple structure of their walls showed conclusively that they were not blood-vessels.

Now, whilst Recklinghausen had described in certain lymph-vessels an epithelial coat, the cells of which were destitute of nuclei, it suddenly struck Auerbach that the scattered nuclei above mentioned might be the nuclei of flat epithelial cells lying in close apposition to one another. Of such a layer, however, no trace was perceptible on simply examining fresh specimens; but he now proceeded to try Recklinghausen's plan of injecting a weak solution of nitrate of silver, and he undertook a fresh series of researches with this object, and on various accounts found the guinea-pig most satisfactory. He then discovered that there were, indeed, epithelial cells lining the tubes; in some the flat cells remained quite clear or presented only a few fine granules, whilst the *nuclei* presented a dark double contour line and distinct nucleoli. In other instances the *cells* remained clear close to their dark outline, but at a little distance a finely granular brown precipitate formed, becoming denser near centre of cell, and in this dark granular material the nuclei appeared only as a clear, sometimes very sharply limited, spot. Or lastly, according to the mode of preparation, he observed only a dark granular mass near the centre, apparently consisting of a kind of precipitate. The two last appearances were chiefly seen in the widest lymph spaces, and he considers that they prove that not the whole of these cells are cornified plates, but that in part, at least, they contain in their interior a softer material, more liable to chemical change, and which is chiefly collected around the nuclei. Sometimes two nuclei are seen in a cell. The sinuosity of the walls of the cells is a very remarkable character, and pretty constant, though it varies in degree; smooth and even borders occur only in the widest canals.

Thus, he believes the finest lymphatics are bounded by a layer of nucleated cells, adhering together and in close apposition. He thinks the lines indicating the outlines of the cells may be possibly due to the presence, as Recklinghausen maintains, of an intervening softer material, which takes the silver impregnation better than the cells, but that they more probably indicate the presence of small furrows between neighbouring cells in which the silver deposit accumulates. He alludes to two forms of stomata that have been noticed in the walls of the vessels, and denies both.

"In the intestinal walls the cells which have been described unite by their edges to form quite a firm membrane, which *alone* constitutes the wall of the lymphatics, and is not in any way composed or strengthened by the surrounding tissues or by any modification of them, and, in point of fact, is for the most part only loosely adherent to them."

The only exception to this is the tissue forming the substance of the villus which adheres to the walls of the enclosed chyle vessel.

The cholera has again made its appearance at St. Petersburg, particularly in the village of Tzarskoe Selo, in the suburbs of that city.

A child has been poisoned at the east end of London by eating misletoe berries.

Proceedings of Societies.

PATHOLOGICAL SOCIETY OF LONDON.

ANNUAL MEETING, DECEMBER 31ST, 1866.

T. B. PEACOCK, M.D., President, in the Chair.

REPORT OF COUNCIL.

THE subjoined is a copy of the report read at the annual meeting:—

"The session of the Pathological Society 1865–6 has been marked by the steady advance in prosperity and usefulness which the condition of the Society's affairs enabled the Council to predict in presenting their last report. It was stated in that report that the number of annual subscriptions which had been received in the past year (303) was the largest which the Society had ever yet attained. In the present annual account, however, the receipt of 314 annual subscriptions is acknowledged, as well as two composition fees from resident members. The number of fees by admissions has also risen from 27 to 35. Thus it is seen that the number of the Society's members continues steadily on the increase.

"Nor will it be denied by those who have taken part in the session which has just terminated, that the activity and exertions of the working members of the Society in the prosecution of the object for which it was founded, is in proportion to its growth in numbers and reputation. The large expenditure which the Council have sanctioned on the seventeenth annual volume is, they hope, justified by the production of a volume, not only much larger than its predecessors, but containing also a corresponding proportion of matter of permanent value and interest. It is, perhaps, a subject of regret that the expenses of a volume, which, like this, shall be worthy of the reputation of the Pathological Society, should so nearly exhaust all the disposable funds. The Council have on this account taken into renewed consideration the possibility of obtaining a place of meeting without the great expense to which they are put for the present rooms. They have accordingly drawn up and presented to the Board of Works a petition for admission into the rooms at Burlington House. As the accommodation which this Society requires can be afforded without displacing, or even inconveniencing, any of the bodies at present lodged at Burlington House, the Council entertain a sanguine hope that the request may be granted.

"The alterations in the rules for exhibiting living specimens, and the rule as to specimens which are not presented when called for in their turn, have been found to work well, and have, it is hoped, quite remedied the slight inconveniences which had been felt in former sessions; they have been printed on the yearly cards.

"Another topic which has lately been discussed in the Society and referred by them to the Council, is the appointment of a Committee to examine and report on all the specimens submitted to the Society as being examples of 'Cancer.' The pressure of the necessary annual business at this period of the session has prevented the Council from completing this matter, but they trust soon to be able to submit the names and regulations of this Committee for the approval of the Society.

"In conclusion, the Council beg to hand in the Treasurer's Report, of which the following is a summary:—

"The total income of the Society was £464 6s. 6d., and the total expenditure £518 19s. 8d., exclusive of £100 invested in the funds. The balance in hand at the commencement of the session was £122 19s. 11½d., of which £100 was thus invested, so that there is at present due to the Treasurer £31 13s. 2½d. The annual income is made up of the following items:—

Sale of Transactions	£24	1	11
Dividends—on the sum of £422 6s. 6d.; Stock—an increase of £113 15s. 2d.; Stock on the sum invested last year . .	10	15	7
Entrance and composition fees and subscriptions	429	9	0

"The last item shows a very great increase on any previous year.

"Thus it appears that the income of the Society, both from subscriptions and investments, is increasing, and although the expenditure this year has exceeded the income, it ought in fairness to be taken into account that the expenditure includes an item of £30 for the printing and binding of fifty copies of volume xv., a volume which has a fair sale, and the printing of which may, therefore, be regarded as a remunerative investment. The large expenditure on vol. xvii., which has amounted to £339 6s. 6d., will also, it is believed, prove remunerative, for the Society now prints 500 copies instead of 450, and is, therefore, in a position, as far as the three last volumes are concerned, to meet the numerous demands which are constantly made for its publications. This being the case the Council see no reason for discouragement, though the balance of expenditure has for once been accidentally against the Society, and if they succeed in getting quit of the great charge for rooms, they will be enabled to devote a still greater proportion of the receipts to the legitimate purpose of improving the yearly volume."

Reviews.

CLINICAL HISTORIES; WITH COMMENTS. By HENRY DAY, M.D., Member of the Royal College of Physicians; Physician to the Stafford County Infirmary. London: Churchill and Sons. 1866. Pp. 254.

DR. DAY, in a very modest unassuming style, describes in his preface the plan and nature of his book. "I have made," he observes, "every history rest upon an observed fact or facts of disease. I have tried to read those facts by the forward light of my time; and in some cases I have ventured to comment, as a practitioner purely, on points of difficulty or doubt. . . . The plan of the book is thus very simple, and very free from originality; but after all it is on the plan of the earlier steps in the history of our art, and it will probably last so long as the art lasts." His volume consists of thirteen of these so-called "Histories," embracing the following subjects:—Cerebro-Spinal Meningitis, a Rare Case of Ovarian Dropsy, on Secondary Cancer in the Lungs, on the Treatment of Acute Rheumatism by Blisters, Rheumatic Fever without Pain, Chorea from Spinal Irritation, Pelvic Hæmatocele, Epilepsy from Peripheral Irritation, Epilepsy from Hepatic Congestion, alternating Leucocythemia, Leucocythemia, Hysterical Facial Paralysis, and Cardiac Apnœa, formerly called Angina Pectoris. We shall briefly notice two of his "Histories," those in which he discusses the treatment of Acute Rheumatism by Blisters, and Cardiac Apnœa. Nothing, as our author well observes, more thoroughly shows our uncertain knowledge regarding the true nature of rheumatism than the varieties of treatment recommended by different physicians of eminence. The alkaline treatment of Basham and others—the lime-juice treatment of Dr. G. O. Rees—the blood-letting treatment of the Paris school a quarter of a century ago—the blanketing system of Dr. T. K. Chambers—the blistering of Dr. Herbert Davies, and the mint-water treatment (obviously a new *placebo*) of Dr. Gill, are all alluded to; and Dr. Day, if he pleased, might have much enlarged his list of special (we can hardly say specific) remedies for this disease. Dr. Day's views regarding treatment are such as most sound physicians will endorse. He maintains that the treatment should never be left to nature alone; that medical treatment does not consist in the administration of drugs alone, and that we should not rely on any one remedy alone. Of the many remedies he has tried there is one which has never disappointed him "in affording marked and almost immediate relief from those agonising articular pains which, with very few exceptions, are found to be present in acute rheumatic fever, and that remedy is the blistering method of Dr. Herbert Davies." The cases of acute rheumatism admitted into the Stafford Infirmary being numerous, he has been able to give the remedy a fair trial, and he narrates the particulars of six instances in which advantage was derived from this treatment. In none of his cases has he, however, trusted to blistering *alone*. "In almost every instance there was at some time or other during the attack, a *plain* and not to be mistaken indication for the administration of a cathartic or an aperient, a tonic or an alterative, a sedative or stimulant, but I by no means admit that the use of these or any such remedies detracts in any way from the merit that may, I consider, be fairly claimed for the relief obtained from severe pain, and the immunity secured from cardiac complications by the aid of the blister treatment." Pp. 69, 70. It would have been satisfactory if we had been told *how* the blistering treatment produces its beneficia symptoms; but all that we learn from Dr. Day on this point is that no particular acid seems to be eliminated by means of the serum discharged, as the latter has always been found to be alkaline or neutral. May not certain lactates or other salts of organic

acids be present in the serum without producing an acid reaction? In concluding this "History" our author draws attention to the singular fact that blisters have the power of rapidly changing the reaction of the urine from a well-marked acid to a neutral or alkaline reaction.

Our limited space forbids us from doing more than briefly noticing the History treating of Cardiac Apnœa or Angina Pectoris. Two cases—one, that of a commercial traveller "addicted to beer," and the other, that of a sober dissenting miner, are very graphically described, and the volume concludes with a few pages abounding in sound practical reflections on the treatment of this terrible disease.

We have long known Dr. Day by reputation as one of our leading provincial physicians; we now congratulate him on his successful appearance as an author, and we trust that in the course of time we shall see a second series of "Histories" issue from his pen.

LARDNER'S HANDBOOK OF NATURAL PHILOSOPHY. Revised and edited by G. Foster, B.A., F.C.S. Walton and Maberly. London. 1866.

Dr. Lardner's handbooks have become institutions. Written at a period when such works were scarce, they perhaps owe a great deal of their popularity not only to that cause, but also to a simplicity of construction and freedom from excessive minutiæ, which are most desirable in a handbook on any practical science. Some of our contemporaries have expressed surprise that Mr. Foster should have devoted his energies to the reconstruction of a book which was certainly anything but a scientific perfection; but although we shall be very glad to welcome an offspring of Mr. Foster's own, we think his time has been well expended in the reconstruction of the present manual. He says in his advertisement that he has endeavoured to bring it into harmony with the best scientific teaching of the day, but has adhered as closely as possible, not only to the arrangement and general plan, but also to the phraseology of the last edition published in the author's lifetime. The result has been the production of a book sound in theory, and constructed upon a model that it would be difficult to replace.

The more important additions mentioned by the editor are in Book 1—A section on the phenomenon of the residual charge of the Leyden jar, and a chapter (xiv.) on sources of electricity other than friction. The principal additions to Book 2 relate to Ohm's laws of the intensity of currents, the tangent galvanometer, the measurement of conducting powers, the rheostat, ozone, the polarization of electrodes, the retardation of telegraphic signals by inductive action in submarine cables, and the laws of the development of heat in the Voltaic circuit. In the same way numerous additions to acoustics.

But the editor of the present edition has done much more than he has here written himself down. The brackets, marking new matter, very frequently appear, and the matter contained n each is generally of the utmost importance, as evinced at page 3, on the nature of electricity and the mode of describing electrical effects and the hypothesis of electrical fluids. Also, the editor's remarks on the chemical theory of a Daniell's cell, page 111, &c.

We think it is a very desirable practice for publishers to bring out old-established works on science, if brought up to the requirements of the times by an able man. But equally to be condemned is the practice of publishers advertising works which are stale and unprofitable. We presume they must find purchasers for such manuals, which are, however, comparatively useless in this progressive age.

TAPEWORMS (Human Entoza): their Sources, Nature, and Treatment. By T. Spencer Cobbold, M.D., F.R.S. Pp. 83. London: Longmans. 1866.

This small and useful volume is devoted to the consideration of only one great group of the parasites which inhabit the human body, the whole subject being treated at great length in the author's larger work on "Entoza." The tapeworms, however, include a considerable number of species, and even different genera, and the distinguishing marks which separate them have been elucidated in several instances by Dr. Cobbold's labours. Thus it is generally supposed that the common tapeworm found in the human subject belongs to a single species—the *tænia solium;* but Dr. Cobbold has very clearly shown that there are two distinct forms of tapeworms—namely, the *tænia solium* and the *tænia mediocanellata*, and he has further shown that the one is introduced by eating pork, and the other by eating beef and veal, and that the latter is the more common of the two. Besides these, Dr. Cobbold describes the elliptic tapeworm and the margined tapeworm *(t. elliptica and t. marginata)*, the spotted, the ridged, the Egyptian tapeworm; besides the pit-headed or broad, and the Greenland tapeworms, which belong to the genus *bothriocephalus*. The researches of modern helminthologists, among whom Dr. Cobbold holds a justly distinguished place, have not been mere matters of dry technical disquisitions, but they have thrown great light upon the origin of these parasites, and have thus indicated the methods to be adopted in preventing their introduction into the human system. In the little work before us, not only are the origin, development, and specific peculiarities of the tapeworms discussed, but the treatment is fully described, and the author insists, and perhaps not without reason, that the drugs employed for the destruction and expulsion of the parasites should be pure and freshly prepared. Among the various tæniacides, Dr. Cobbold gives the preference to the root of the male fern, administered in the form of the ethereal extract.

CURRENT LITERATURE.

Punctual to date, the fifty-fourth volume of Braithwaite's *Retrospect of Medicine*, for the second half of the year 1866, reached us by the 1st of January. Old subscribers will find this volume quite equal to its predecessors. Woodcuts of new instruments are introduced where necessary, among which we notice Mr. Sheraton's steel fillet, and an ingenious stricture dilator on the screw principle, invented by Dr. Aspray. Another interesting feature of *Braithwaite* is the Synopsis, of about forty pages, containing a brief abstract of the most practical articles in the volume, arranged alphabetically.

We have also received the new volume of the *Half-yearly Abstract of the Medical Sciences.* This volume contains, in addition to the practical digest of the periodicals, reviews and bibliographical notices; and in an appendix the editors have furnished a translation of the valuable *Rules for the Guidance of Sanitary Authorities, Practitioners, and the Public, during Epidemic Cholera*, drawn up by Professors Griesinger, Pettenkofer, and Wunderlich.

The new number of the *Westminster Review*, in its account of contemporary literature, notices a number of medical and scientific works, thus furnishing an additional attraction to those of our profession who support this able quarterly. We refrain from further details respecting a work the character of which is so well known, merely saying that the present number maintains the usual high standard.

Of other journals lately received we may name the *Popular Science Review* and *Science Gossip.*

Dr. Forbes Winslow has published, in the form of a pamphlet, the views on *Uncontrollable Drunkenness* (Hardwicke) which he lately so eloquently advocated in the *Pall-Mall Gazette.* We commend Dr. Winslow's statement as a judicious summary of the arguments in favour of properly supervised sanatoria for drunkards.

A small work on *Saline Venous Injections in Cholera*, by G. F. Girdwood, M.D., who tried the plan in 1832, and advocates it as especially valuable, because it *can do no harm*, we have handed to the writer of our Special Report on the subject.

For Mr. Christopher Heath's pamphlet, *On the Endoscope as a Means for the Diagnosis and Treatment of Urethral Disease* (J. Churchill and Sons), we have no commendation. As a contribution to a contemporary it might pass muster; but on reprinting it in pamphlet form, the author claims for it a position to which it is not entitled. It is a mere hash of what has been previously done, and better done too, by others. True—to his pages of description, which might well be en-

titled *after Cruise*, Mr. Heath adds cases examined by him, but in which nothing was found that a first year's student could not describe on his first attempt. Desormeaux and Cruise have both done good service. If Mr. Heath thinks to snatch their laurels, and connect his own name with the endoscope by means of so useless a pamphlet as the present, we can assure him he is altogether mistaken. Let him add something material to our stock of knowledge, and we shall be happy to welcome him in this or any other field; but to dish up the contributions of others is unworthy of his position as a teacher.

The Medical Press and Circular.

"SALUS POPULI SUPREMA LEX."

WEDNESDAY, JANUARY 16, 1867.

INFANTICIDE.

Among the social questions of the day that of Infanticide is very properly, at the present moment, engaging much of the attention of the community, and the Harveian Society of London has done a good work in appointing a Committee for investigating the whole subject, with a view of revising the laws now in operation in reference to this very prevalent crime. This Committee has collected a great amount of information, and has spent much time in deliberation, and the result has been a report which will very soon be presented to the profession and to the public through the medium of the press.

It is quite evident that the aspect in which Infanticide presents itself in general to the public mind discloses only a very small part of the gigantic evil, of which the proceedings in our courts of law exhibit the superficial results. A poor miserable female, broken down in health and dejected in mind, is dragged as a prisoner at the bar of a criminal court, charged with the crime of wilful murder, the victim being her own infant, whose life all the instincts of human nature should instigate her to preserve. Formal evidence is given of the death of the child, and of its life having been terminated by other than natural means, and of the recent delivery of the mother; but notwithstanding the weight of the evidence, the prisoner is generally acquitted on some technical objection, or on the suggestion of some doubtful point in physiology; or if a conviction is obtained, the capital sentence, which would necessarily follow in other cases, is hardly ever, and, we might say, never carried into effect. Indeed, the spectacle of a wretched woman being dragged to the gallows for such an offence would in all probability so outrage the public mind that in any subsequent case no conviction would ever take place at all, and the law upon the subject would be practically a dead letter. Again, for one woman who is thus brought before the legal tribunals for the murder of her infant, how many are there who entirely escape, and whose crime is suspected by none, the murdered offspring having been so successfully removed by the ingenuity of the mother or her accomplices that the relationship between the victim and the murderess remains for ever concealed?

But, rare as the convictions are for the crime of Infanticide, and comparatively light as the punishment is which is inflicted upon the guilty party, there can be no question that the crime itself is widely prevalent in the present day, and that it constitutes a dark blot upon our boasted civilization. One great difficulty in dealing with the offence arises from the fact that, although the female alone appears at the bar of justice, there is always necessarily another human being who must have been a participator, at least to a certain extent, in her guilt. The man in such cases, although he may have been originally equally, or more guilty than the woman, entirely escapes; while the poor unfortunate woman endures the pain, the misery, the shame, the exposure, and the risk of punishment. Hence arises the social question, which the world has been too long content to ignore, as to the measures of repression which the laws or the customs of the age ought to institute with a view of equalising the penalties between the two sexes, in reference to a fault of which they are at least jointly guilty, or as to the provision which ought to be made for the maintenance and support of the offspring of such illicit unions.

To these questions the attention of the Committee of the Harveian Society has been specially directed, and they have thoroughly investigated the laws relating to the care of illegitimate children, and to the punishment of Infanticide. They have come to the conclusion that Foundling Hospitals, if established on such a scale as to be efficient, would only encourage the evils which they are intended to obviate, and that an increase of infant mortality, to say nothing of other injurious consequences, would result from the reception of a large number of children into such institutions. The present system of affiliation, which requires the woman to bring corroborative proof in all cases as to the paternity of the infant, and which affixes so small a sum as half-a-crown a week as the remuneration upon the reputed father for the support of the child, is also very strongly condemned; and it is suggested that more facilities should be allowed to the woman to prove her case, and that under the existing rate of the cost of provisions, a larger weekly sum should be accorded to her. The punishment of Infanticide, unless of course in very aggravated cases, should fall short of the extreme penalty of the law, and should be reduced to that of murder in the second degree, in accordance with a late recommendation of the Commissioners on Capital Punishment.

It would, of course, be easy to dispute the efficacy of some of the proposals made by the Committee, and, with all due sympathy for the weaker sex in their sorrows and sufferings, it must not be forgotten that many women, for purposes of revenge or jealousy, or gain, might, and do, involve innocent men; but, on the other hand, it cannot be denied that the present laws press with undue severity on the woman, and that they loudly call for revision. The Committee of the Harveian Society deserve the warmest thanks for their meritorious labours, which we cannot but believe will have the effect of impressing our legislators with the magnitude of the exisiting evils, and with the necessity of introducing measures for their redress.

THEORIES OF CHOLERA.

II.

We have before us a valuable pamphlet, entitled *Thoughts on the Present Theories of the Algide Stage of Cholera*, by John Cockle, M.D., Physician to the Royal Free Hospital. The subject is so ably treated that we almost regret not having the opportunity of reproducing the whole twenty-four pages into which Dr. Cockle has condensed his views. As, however, space forbids this, and, we may add, justice to the author, we propose to lay before our readers as full an abstract as we can. Two theories are examined by Dr. Cockle—one that a "poison is breathed into the lungs," and seeks "elimination through the gastro-intestinal tract;" the other that the poison finds access through this tract, whence it spreads its influence over "both nervous and circulating systems." The first theory adopted by Dr. Johnson is first examined. Dr. Cockle considers that, if this "theory be correct, the elimination act is a necessary consequence;" and he then proceeds to examine the theory in its several parts, arriving at the conclusion that it does not adequately explain the phenomena of the disease, nor yield successful results when put to the test of practice.

The objections to the theory are thus summed up by Dr. Cockle:—

"The alleged spasm is rather a matter of inference than of actual demonstration. The phenomena supposed to depend thereon may admit of a different explanation. It is unquestionably shown by morbid anatomy that black blood is occasionally found in the left ventricle, and sometimes in considerable quantity in the upper portion of the aorta. Its presence with such character appears to be totally irreconcilable with any hypothesis of simple spasm. If the spasm were even assumed at times as clonic, to relax its grip, the blood (unless the poison possessed the power to change its colour, which is without a shadow of proof) must be oxygenated, for, as a rule, the air traverses freely the remotest cells. It is also opposed by the experiments of Majendie, who, though noting the rare occurrence of almost perfect vacuity of an artery, was nevertheless most firmly convinced that the blood traversed the pulmonary capillaries even in the most exquisitely-typed instances of algide condition,* and who illustrated the proposition by exhibiting the black blood, just abstracted, to his hearers, as also by the injection of ether and dissolved camphor into the veins and bowels and detecting the vapour in the expired air.

"Moreover, were the theory correct, no sooner had the incubation stage expired and the actual invasion period set in, the agent having for its essence the production of spasm of the pulmonary arteries, such spasm should correspond with the invasion, and algide phenomena precede, at least coincide, with transudation into the intestines, and decrease in proportion to the eliminative discharge. Is this sequence in accordance with ordinary observation?

"Again, if it be a characteristic of cholera poison to induce spasm of the pulmonary arterioles and of those of the muscular tissue (?), causing the severe cramps, why do the intestinal capillaries evade the law? We can quite readily understand the action of an agent upon a given organ, or system of organs, *e.g.*, opium upon a certain portion of the brain, strychnine upon the spinal chord, emetin on the stomach, and so forth; but we can hardly understand an agent though for a purpose of elimination, blowing, as it were, hot and cold with the same breath, as for example, strychnine contracting one set of muscles and relaxing another, Agonising cramps are certainly not the exclusive monopoly of epidemic cholera poison, for nothing surely could exceed the violence of those mentioned by Sydenham in the bad sporadic cholera of 1676, the patient jumping out of bed frantic with pain, with a pulse scarcely perceptible.* Death often occurred in twenty-four hours.

"Next, with respect to the influence of warm saline injections into the veins. The instantaniety of their action shows that the pulmonary circulation must be free. But, as to the explanation of this indisputable fact? Is it in accordance with Dr. Johnson's views that their temperature relaxes spasm, or may it be that their restored liquidity of the blood again affords the condition of its motion, it is, I cannot but imagine, making a large demand on our belief to require the admission that warm venous injections should so quickly cause a spasm to unloose its hold that had obstinately resisted the opium, stramonium, valerian, ether, inhalation of hot vapour (Piorry) of ether, so often and so vainly tried! Saline injections by the time they reached the heart could scarcely possess a temperature very much higher than that actually existing in the right chambers, why then should they be more efficacious in a mere point of temperature than the warm blood therein, were not this blood vitally and physically changed and stagnant by the privation of that intercellular fluid which we are taught by physiology imparts the requisite glibness to its movement, and without which arrested movement would be the inevitable result. This want of motion may be increased by the tendency of the augmented number of white corpuscles, mentioned by Virchow, Reinhardt, and Leubuscher, to adhere to the vascular walls. In fine, saline injections afford for a time pabulum and restore the equilibrium of fluid pressure; they fail, however, in maintaining the vital machinery permanently in action, partly because they again transude, but principally because they fail in what the blood demands, the restoration of its proteine elements.†

"Lastly, we must look at the theory of spasm as tested by the existence of dyspnœa. If the minute branches of the pulmonary artery were closed by spasm, dyspnœa should scarcely ever be absent; indeed, it should be a very prominent symptom in the algide stage; that it is not so in many cases I can most confidently assert. The observations made by Mr. Hill and myself at the Royal Free Hospital, and by me at the East End of London I can truthfully say have been too carefully made to overlook this important point.‡ I admit the difficulty holds on any theory, still the fact remains and must be explained by some condition of innervation.§ The percussion of the cardiac region also yields no evidence of distended right

* La continuation de la circulation à travers le tissu, pulmonaire est un point capital relatif à l'histoire de la respiration des cholériques. —*Leçons, etc.*, p. 104

* In the epidemic of Berlin, 1848, a precisely similar instance is recorded by Schütz. Virchow, *Archiv.*

† In connection with the question of venous injection, it may be excusable to state that I have paid much attention to this subject, and was, unless I mistake, the first in this country to propose transfusion of blood in some of the blood poisons (*Essay on the Poison of the Cobra di Capello*, Highley, 1852). A week or two since a letter on this subject in connection with cholera was sent to the editor of the *British Medical Journal*, Nov. 10, who did me the favour to insert it. Since then, I have again looked over the results obtained by Dieffenbach from transfusion in cholera, and fancy I discover the cause of his failure. It now occurs to me that the way to insure the success of the plan is, first to employ the saline injection, and when the circulation is restored, by giving to the blood discs their normal liquidity, then to transfuse blood under the condition insisted on by Panum. The action even of saline injection surely points out the path to follow, no other remedy in the algide stage of cholera for one moment approaches them in their magically resuscitative power.

‡ The observations of Reinhardt and Leubuscher, *Epidemic of* 1848, fully confirm this statement. "Bei vielen Kranken blieb indess die Respiration bis zum Tode ein ruhig." Virchow, *Archiv*, s. 440, II. Band, 1849.

§ Ainsi donc si la respiration des cholériques est altérée, ce n'est pas par obstacle physique au cours de san le gà traverspoumon. Majendie, p. 115.

chambers.* The left ventricle evidently beats to the last; and although the sounds are dull and toneless, resembling those produced by Dr. Halford on closing the pulmonary veins for a short time, still some blood must pass as we have already seen. Occasionally the cardiac sounds are attended with bruit from the obstruction offered by the thick and clotting blood.

"The phenomena of intermittent cholera and of the occasionally observed lung cholera are as inexplicable on this as any other hypothesis."

The second theory next occupies Dr. Cockle's attention. Carefully comparing with cholera other affections of the gastro-intestinal tract, and especially such as have any resemblance to that disease; and, considering the "general facts connected with the action of poisons," he gives in his adhesion to this theory, although admitting that the analysis of its pathology which he offers is "very far from perfect."

As, after all, treatment must be the touchstone of theories, we cannot do better than quote the conclusions to which Dr. Cockle arrives, commending as we heartily do the whole pamphlet to the earnest attention of our readers:

"The circle of inquiry," he says, "appears now so much narrowed that we must hope these difficulties are not invincible, and that ere long we may be rewarded with a pathology sufficiently comprehensive to warrant a more uniform plan of treatment than at present exists; for it is certain that one or other theory must be radically wrong, and consequently, in its application, proportionately destructive. In our present painful transition stage of treatment, each practitioner must, from the conflict of views,† trust to his judgment in the individual case.

"That cases may do well without our aid we sometimes see, for cholera has its *plus* and *minus* forms. But, face to face with the disease in its more serious shape, eye witnesses of the telling influence of the oft frightful drain, does it impress us as nature's act to cure, or carry with it one character of safety? do patients tell us at each escape of fluid they feel relieved or have their strength increased? for such are the results that should attend eliminative or critical discharge.‡ If they do their looks belie them strangely. In such a state, no matter how we regard the disease, fever or flux, irritation or poison—no matter how we treat it—calomel to restore the bile, salines to moderate the congestion, or opium and astringents to repress—again and again we seize the symptomatic indication, and try our best, each in his way, to stop that vomiting and purging, alike the symptoms and the danger of epidemic cholera.§ Is this mere routine, or the settled conviction of reasoned experience? If we are wrong, we have at least for our consolation the example of our betters; take that of the late Dr. Graves, a physician of more than ordinary fame, or look abroad, and search opinion there; and in the face of such teaching it must, indeed, require overwhelming evidence in favour of an opposite procedure; for the experience of able men, when theories clash, must be the fitting and the only guide.

One closing argument in favour of the arrestive plan may be drawn from the state of the epithelial lining of the gastro-intestinal tract; the longer the drain the greater the destruction, and the more tedious and intractable its repair.

* Die starke Füllung des rechten Hertzens scheint während des Lebens noch nicht vorhandin zu sein; die Percussion ergibut (constant?) einen Kleinen Umfang des Hertzens. Greisinger. Virchow, *Handbuch*, B. II., s. 326.

† Compare, for example, the theory of Dr. Johnson with the views this week put forth by a physician apparently of much experience in cholera, Dr. Beamish.—*Medical Press and Circular*, Nov. 13.

‡ Is the discharge eliminative, and if so, what is eliminated by the drain? Nothing that the most refined chemistry or microscopy can detect, nothing that seems directly infectious, but only becoming so from decomposition. Arguing from analogy, the elimination that removes a poison from the blood generally happens in the febrile or reactive stage, the visible evidence of Nature's power to struggle with her oppressor. "Nature," says Sydenham, "being by this means irritated, raises a fermentation in order to expel the enemy with less difficulty, this being the common instrument she uses to free the blood of its morbid particles, as well in fevers as in some other acute diseases." There are other affections caused by some poison in the system, as ague, erysipelas, and others, in which we do not trust to any elimination, but having tolerably certain remedies at hand, stop the disease yet nascent, not only without injury, but really with the prevention of injury. In the latter disease, we try to arrest even the elimination by covering the cutical patches with iron solution.

§ Unless some singular error prevails, the arrestive treatment yields by far the best results. According to Boudin, *Traité de Géograp. et Statistic. Médicales*, p. 366, 1857, the mean mortality is thus stated:—

Evacuant treatment	...	...	...	71·7 in 100	
Stimulating	,,	...	...	...	54 ,,
Alterative	,,	...	...	...	36 ,,
Astringent	,,	...	...	...	20 ,,

Notes on Current Topics.

Street Reform.—We have to announce the formation of a "Street Reform Society" in London. Verily, it is time something were done, for the streets of London have long been a disgrace to the commercial metropolis of the world. Considering the demands of its population, we have no hesitation in stigmatising the state of the London streets as worse than that of most of the second-rate capitals of Europe. In the minds of many who confide exclusively in the narratives of discontented travellers, Rome has long occupied the pre-eminence for dirty streets; yet with all its boasted wealth and progress, we could point out localities in London which we defy any one to parallel in the Eternal City, while the main thoroughfares of Rome, considering the state of her exchequer, compare favourably with those of London, and so far reflect credit on the Roman municipal authorities. The Street Reform Association will, we doubt not, meet with wide support.

Sir James Y. Simpson.—It is not without gratification that we are able to report that this esteemed and learned Professor has so far recovered his health as to be able to resume his invaluable instruction at the University of Edinburgh. During Sir James Simpson's illness his duties have been performed for him by Dr. Keiller; but notwithstanding this gentleman's able labours, the pupils could not do otherwise than welcome back with enthusiasm their renowned clinical teacher. Sir J. Simpson has recommenced his instruction with a Course of Lectures on Anæsthesia, with which his name will remain indissolubly associated.

The Government of London.—A deputation from an Association for the Better Local Government of the Metropolis has been received by Mr. Secretary Walpole. The right hon. gentleman acknowledged that the local government could be improved, and promised to lay the matter before his colleagues. The association proposes to create ten municipalities for the metropolis, a system which may obtain support from the really superior manner in which such matters are carried out on the Continent. A better time could scarcely have been chosen to press the subject on the attention of Government than immediately after the most signal failure of the existing authorities to cope with the late snow storm. Few arguments could be so convincing that a change could scarcely be for the worse than the fact that for three whole days London was reduced to the state of a country village, and locomotion, except on the good old-fashioned plan of "on the ten toes," was during that period almost impossible—the underground railway alone reaping the benefit of this sudden stoppage of omnibuses, cabs, and other vehicles.

Evicted Tenants in London.—The progress of great public works has deprived so many poor people of their homes, and consequently caused so much overcrowding, that an association has been formed to aid them. A deputation from this Society has already been received by Lord

Derby, who declared it was not a question of party, and assured the deputation that if the Government could see their way to a practical measure they would be happy to introduce it. There are undoubtedly many economic difficulties, which the political journals will not be slow to discuss. As medical men we are concerned at the great increase of overcrowding that has undoubtedly taken place, and should heartily rejoice in any just measure which would avert it in future. It was stated by one speaker that 50,000 of our working classes had been dispossessed in the last four years ; but, he added, that during the same period 10,000 such persons had been provided with improved dwellings by philanthropic efforts. One-fifth of the evil has therefore, according to this statement, been remedied. We may add that a large number of workmen now live at considerable distances from their work, and travel by the underground railway as regularly as the middle classes. It may, therefore, be hoped that things are gradually improving again, the height of the speculation fever being over. Remembering, too, that there is a fair prospect of large returns for capital laid out in dwellings for the working men, we are not without hope that, before Parliament is likely to interfere, a good sum of money will have been invested in this manner.

The British Pharmacopœia.—We are promised a new edition of this national work almost immediately. We trust that it may be found to be a considerable improvement upon its predecessor, and from the delay that has taken place in issuing it, we may presume that this will be the case. Perhaps it would have been more just towards the purchasers of the old edition to have published a separate appendix containing the changes authorized. So important, however, is the possession of one standard authority for the three kingdoms, that possibly the murmurs of dissatisfied purchasers may be drowned in the applause of those who find the work equal to their anticipations. We certainly do feel, however, that the price of the "Pharmacopœia" has hitherto been much too high. A work imposed upon a large class of purchasers ought certainly to be sold for the price of printing, paper, and binding. It is not the practice of the Government to net large profits on blue books, nor should the Medical Council on their "Pharmacopœia." A good deal of information respecting the contents of the forthcoming work has transpired in various quarters. We do not propose to repeat it, nor to hazard a series of guesses on the subject, still less shall we descend to picking up notes of conversations with those who are behind the scenes. The work has been deliberately carried on in the dark, very little has been allowed to ooze out of the intentions of those entrusted with it, and we should esteem ourselves unworthy of our position as professional journalists did we attempt to entrap any one into giving us premature and imperfect scraps of unauthorized information.

Poor-Law Hospitals for Contagious Diseases.—It is reported that the Poor-law Board are not unlikely to erect two or three hospitals for the accommodation of London paupers labouring under contagious diseases, including fever. Such a step would probably prove of considerable service, and it has been suggested that for the Northern Districts the existing "Fever Hospital" at Islington might be purchased. In the east we do not see why the temporary cholera hospitals, so serviceable in the epidemic of last summer, might not be utilized. They could be opened at once, and thus serve all the time during the building of more suitable hospitals. This would also enable the Poor-law Board to aid in the emergency of another outbreak of cholera, should we be so unfortunate as to have a recurrence of the disease next summer.

This, also, presents an opportunity of arranging a good working staff. To each of these hospitals we should be glad to see two or three physicians attached, as well as a resident and visiting medical officer. It would be positively wrong to suffer the knowledge obtainable at such hospitals to run to waste for want of trained men, competent to gather it, while to impose the medical charge of such an hospital on the ordinary parish doctor would be an unjust addition to his already too heavy duties, inasmuch as he could not, whatever his energies, do justice to both hospital and district ; it would also constitute a positive cruelty to the paupers.

Cholera at Carnarvon.—In consequence of the outbreak at Carnarvon, Dr. Seaton was sent by the Privy Council to inspect and report upon the state of the town. He found nothing new, and has only to repeat the old tale of dirt and carelessness of every kind. He reports that "there exists everything to invite and give intensity to an outbreak of cholera, or any other infectious or epidemic disease ; great overcrowding and bad house construction, bad water supply, bad drainage, absence of privy accommodation, and accumulation of surface nuisances." It is useless to quote further. Dr. Seaton supports each of his statements with an array of facts that we commend to the attention, first of all, of those in authority at Carnarvon, and then to all those who doubt the power of dirt to produce disease. What matters the exact proportion of fatal cases to recoveries in a people surrounded by such an accumulation of filth. That any have escaped is evidently not due to the sanitary precautions of the Carnarvon authorities.

Scurvy.—Mr. Harry Leach, Resident Medical Officer to the *Dreadnought* Hospital Ship, communicates to the *Times* that 101 cases of scurvy were received on board during the past year, and that of these only five cases were brought from foreign ships. Here, then, is statistical proof of some sad deficiency in the British Mercantile Marine, which loudly calls for legislative interference. The English sailor droops under an easily preventible disease, while the shipowners declare that there is no need for any change. In the name of humanity we protest against all this needless suffering. We repeat the shocking figures, 101 cases of preventible disease, admitted to one hospital ship on the Thames in 1866, and out of these 101 only five from foreign ships. We ask philanthropists to reflect on the statistics. We call upon the Legislature to prevent the continuance of this cruelty.

The Naval Medical Service.—The Medical Service of the Navy being at a very low ebb at the present time, it appears that the Admiralty have come to the resolution of tempting medical candidates by offering a bounty to medical students. It is proposed, we understand, to offer the sum of two pounds a week to students who have completed their third year of medical study, and to continue that payment until the completion of the curriculum, when the candidates will each be required, under a personal bond (into which they must have entered in the first instance),

and two sureties, to join the service of the navy. In case of want of success, however, in passing the necessary examinations, the candidate and his sureties will be called upon to refund to the authorities the money which has been advanced. This scheme has not yet been promulgated, and we are very doubtful as to its success.

Seasonable Accidents.—During the few days of frost and snow, on account of the numerous accidents caused by the slippery state of the roads, falls in skating, &c., which occurred in private practice, we often heard it remarked that inquiry at the hospitals would show a great increase in the cases admitted during those days. It appears, however, that such is not the case, an absolute diminution in the number of accidents admitted having been noticed. At Guy's, St. Mary's, King's College, St. George's, and the London Hospitals, there were specimens of frost-bite to be seen. At St. Bartholomew's and University College cases of fracture of the patella were admitted. At most of the hospitals there were other fractures, bruises, and concussions caused by falls. At the Middlesex a case of Potts' fracture in an elderly man. Some accidents have also been reported in the newspapers as occurring to men engaged in clearing the roofs of houses of the snow. These men have fallen through skylights or trap-doors, and, in some instances, have severely injured themselves; yet, on the whole, as already stated, the cases of accident admitted to the London hospitals during the frost were much below the average. The result is probably due to the fact that no vehicles were in the streets, and few men at work in many dangerous occupations, such as building, or other work on scaffolding and ladders.

Infringement of the Lunacy Laws.—It cannot be too widely known that the Commissioners in Lunacy are compelled to take proceedings against any one transgressing *inadvertently* the laws for the protection of lunatics. Nor is this at all to be regretted. It is a very easy matter for any one in doubt to take the obvious precaution of inquiry, and it is necessary, for the sake of the sufferers, that their rights should be most strictly maintained. Let it be thoroughly understood that a medical man cannot legally receive a lunatic boarder without the proper certificates required by the Act. Mr. Nayler, of George-street, has recently been put to much inconvenience from an inadvertence of this kind. He has been summoned before the Central Criminal Court, and there required to enter into his own recognizance for the sum of £100 not to repeat the offence. We congratulate Mr. Nayler on his escaping thus easily, annoying as even this must have been to him; but, in spite of the high testimony to his character produced, and which partly tended to this conclusion, we cannot deny that the Commissioners have only done their duty.

THE PUBLIC HEALTH.

(From the Registrar-General's Weekly Return.)

The deaths registered in London during the week ending January 5 were 1437. It was the first week of the year, and the average number of deaths for that week is, with a correction for increase of population, 1615. The deaths registered in the week were thus 178 below the average. The effects of the weather will, we may expect, be visible in the returns of next week, as registration and funerals were alike more or less retarded by the severe frost and the great snow-storm.

43 deaths from small-pox, 36 from measles, 35 from scarlatina, 54 from whooping-cough, 44 from typhus, and 16 from diarrhœa were registered during the week. No death by cholera was recorded.

A labourer, aged 45 years, died in Fenchurch-street, city, on the 2nd of January, from "want of food, accelerated by cold."

The deaths of 17 infants, who were accidentally suffocated in bed, were registered in the week; the ages of these children varied from three weeks to six months. Five of them were killed on the 26th of December, three on the 27th of December, and two on the 1st of January. The deaths of six chlidren from burns or scalds were also recorded. After festive nights parents cannot take too much care of their children.

The annual rate of mortality last week was 24 per 1000 in London, 31 in Edinburgh, and 25 in Dublin; 24 in Bristol, 24 in Birmingham, 35 in Liverpool, 31 in Manchester, 29 in Salford, 22 in Sheffield, 30 in Leeds, 28 in Hull, 44 in Newcastle-upon-Tyne, and 33 in Glasgow. The rate in Vienna was 31 per 1000 during the week ending the 22nd ult., when the mean temperature was 16·7 deg. Fahrenheit lower than in the same week in London, where the rate was 23 per 1000.

At the Royal Observatory, Greenwich, the mean height of the barometer in the week was 29·408 in. The barometrical reading increased from 28·91 in. on Wednesday to 29·92 in. on Saturday. The mean temperature of the air in the week was 25·2 deg., which is 11·75 deg. below the average of the same week in fifty years (as determined by Mr. Glaisher). The highest day temperature was 41·9 deg., on Sunday. The lowest night temperature was 6·6 deg., on Saturday. On Friday the lowest temperature was 7·7 deg. The entire range of temperature in the week was 35·3 deg. On every day of the week the mean temperature was below the average, and the defect on Friday was no less than 23·2 deg. The mean of the highest temperatures of the water of the Thames was 39·3 deg.; that of the lowest was 36·3 deg. The difference between the mean dew-point temperature and the air temperature was 3·4 deg. Snow fell on Wednesday to the depth of about ten inches. The direction of the wind was variable. According to a return furnished by the engineer of the Metropolitan Board of Works, the average daily quantity of sewage pumped into the river Thames at the Southern outfall works, Crossness, was 180,230 cubic metres.*

The Year 1866.

The great cities of the kingdom may be thus arranged according to their rates of mortality during the past year. To 1000 persons living, the deaths in Birmingham were 24, Hull 24, Bristol 25, Edinburgh 27, Sheffield 28, Dublin 28, Salford 29, Glasgow 30, Manchester 32, Newcastle-on-Tyne 32, Leeds 33, Liverpool 42. The mortality was lower than it was in the year 1865 in Manchester, Salford, Birmingham, Hull, Edinburgh, Glasgow; and higher in Leeds, Bristol, Dublin, and Liverpool. Cholera was excessively fatal in Liverpool.

In London the mortality was at the annual rate of 26, which is two above the average, entirely due to cholera, happily confined within narrow limits. The mortality of London, west, north, central, and south, holding 2,430,046 people, was 24¾, or slightly above the average, while in the east districts the rate was 34 in 1000 among 606,945 inhabitants. The causes of this local intensity have already been explained. Cholera was epidemic, and proved extraordinarily fatal for a short time, from causes that favoured the diffusion of its elements. The detection of these causes, and the judicious hygienic measures which were employed, generally stopped its progress, and saved, as well as much suffering, many thousands of lives.

MEDICAL TRIAL.

Central Criminal Court, January 9th.

OFFENCE AGAINST THE LUNACY LAWS.

Mr. George Nayler, surgeon, living at George-street, Hanover-square, was indicted for having unlawfully received and boarded, at a certain house in Hanwell, not being an hospital registered according to the Act of Parliament, a certain patient as a lunatic, without a proper order of medical certificate as required by the Act.

The defendant pleaded guilty.

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* A cubic metre is equal in volume to 35·3174 cubic feet, or to 220·0967 imperial gallons. It is nearly equivalent to the old English "tun" of four hogsheads, holding 35·248 cubic feet. It is in general use on the Continent, and is a much better unit for measuring sewage or water supply than the gallon.

Mr. Metcalf (with whom was Mr. Beasley), instructed by the Commissioners in Lunacy, informed the Court that the defendant had transgressed the law by receiving into his house at Hanwell the son of a clergyman, at the charge of £130 per year without the proper order.

Mr. Poland addressed the Common Serjeant for the defendant, and called Dr. Jenner, Physician in Ordinary to the Queen; Mr. Pollock, Surgeon to his Royal Highness the Prince of Wales; and Mr. Holmes, surgeon, who gave the defendant the highest possible character both for his professional ability and as a gentleman. They severally expressed their belief that he was a person who was incapable of a dishonourable action.

The Common Serjeant said that it was a very proper matter for the Commissioners to take up, and he considered that in thus bringing it forward they had done that which was sufficient. It would be his pleasing duty to allow the case to stop here upon the defendant entering into his recognisance for £100. He was sure that there would be no fresh cause of complaint against the defendant.

Correspondence.

THE *LANCET'S* LATEST AND GREATEST DISCOVERY.

TO THE EDITOR OF THE MEDICAL PRESS AND CIRCULAR.

SIR,—All modern medical teaching has been thrown into the shade by the astounding information in one of your contemporaries that "the *radiation* of yellow fever from St. Thomas to the English coast has not ceased." Who may be the fortunate *savant* whom the world has to thank for demonstrating that yellow fever emanates from rays, the curious in science will be anxious to know. The description of rays, with illustrations, &c., &c., will, doubtless, shortly follow, and thus prevent inquirers being kept in unnecessary suspense. Communications in the same number favour the impression that the water contamination *mania*, bearing on the propagation of cholera, is beginning to admit of something like a return to a low form of common sense.

The water drinkers cannot admit that even in the cholera districts they died in the average proportion, and I congratulate them that they practically ignore by their protests the unscientific and feebly supported assertions on the question.

The much lamented Dr. Snow may be regarded as the propounder of the water contamination theory, founded mainly on the outbreak of cholera near Golden-square, London, which was supposed to have originated, and very generally believed (consequent on the constant repetition, both in medical and non-medical circles), from contamination of the Broad-street pump water by the secretions of cholera patients, and apparently confirmed by the oft-repeated assertion that the arrest of the disease was due to the locking up of the said pump. The locking up of the pump had about the same amount of influence in arresting the disease that the drinking of the water had in its sudden irruption, as the water was not even suspected until the disease had begun to subside, which upon that theory it should not have done, the water having necessarily become daily more contaminated and poisonous.

The same number of the journal to which I allude has also the temerity to re-proclaim another error:—

"Not the least curious fact in the epidemic part of the history of the year has been the repeated importation of yellow fever, extending in Swansea, in August last, to the general community, and causing fifteen deaths out of twenty cases."

There was no yellow fever, extending in Swansea, in August last, to the general community, nor in any month of the past year, or of any other year. There was yellow fever in Swansea in September and October, 1865, but the deaths were not fifteen in twenty cases. Dr. Buchanan, appointed by the then Government to report on the outbreak of yellow fever at Swansea, remarks—"That there were twelve centres from whence the disease, if it had been communicable from person to person, had the opportunity of spreading, and that many of these localities were perfectly adapted for the spread of contagious diseases, yet in no single instance out of all these did a single person get yellow fever, or any disease simulating it."

Thus is it demonstrated beyond a doubt that the disease did not spread to the general community.

With such examples before us, what dependence can be placed on the present teaching of a periodical which in years past could scarcely be accused of such superficiality and scientific inaccuracy, whatever other charges might have been fairly launched against it?—I am, sir, EDWIN HEARNE.

CLITORIDECTOMY.

TO THE EDITOR OF THE MEDICAL PRESS AND CIRCULAR.

SIR,—I had the *best* reasons for believing that a Committee of independent Fellows of the Obstetrical Society, in whom I have confidence, would have been proposed at the last meeting of the Society, and was sorry to find that the Council would not entertain the subject. I have now, therefore, written to the new Council to say, that if they will appoint a fair and impartial committee, I will place every facility in their hands for investigating my cases most rigidly. In the meantime, I feel confident that the new President will not allow personalities and unjustifiable language to be used against any Fellow in future discussions; and I beg to remind all Fellows of the Society that I am in no way to be held accountable for any damage the Society may sustain by the discussion of Dr. Tanner's paper.—I am, sir, your obedient servant,

I. BAKER BROWN.

TO THE EDITOR OF THE MEDICAL PRESS AND CIRCULAR.

SIR,—Not being an operator, it is not my intention to enter into the merits or demerits of this operation, the discussion being in much more able hands, but writing under the above heading, I feel in justice to my friend Mr. Baker Brown, I ought to state that he has performed that operation both in the Home and in private with my entire concurrence, and with marked benefit to my patients, who, I am satisfied, under medical treatment alone, would have remained in their distressing condition until now.

Dr. Greenhalgh in his letter published in the *Lancet* of the 29th ult., referring to his visits to the London Surgical Home, after paying a well-merited compliment to Mr. Baker Brown as an operator, goes on to say:—

"But I saw more than that, truth compels me to add that I saw there scenes and heard details which I will not further characterise than by saying, that I thenceforth advised my class never again to visit that Institution, and came to like resolution as regards myself."

This statement embodies a charge by insinuation of the *gravest* nature against some one or more belonging to or present at the Home; and as one of the late Medical Visitors, and a constant attendant at the operations for years, I feel I should be neglecting my duty, did I not notice this part of Dr. Greenhalgh's letter, my experience being the very reverse of his.

I have found the Home in every sense what its name implies, and it is not, and should not, be spoken of as an ordinary hospital. There gentlewomen, that would not go to a regular hospital, receive skilled medical and surgical attendance with careful nursing that would otherwise be beyond their reach, and not only has the Institution been recognised by royal favour after the test of personal inspection. But I have in my possession a mass of written evidence of its work, from medical men and grateful patients, who having been there, give as the result of their experience a very different verdict to that of Dr. Greenhalgh, and there is at this moment a lady patient of mine there who will fully confirm every word I have written in its praise.

In conclusion, I would ask Dr. Greenhalgh in fairness, to myself and the other gentlemen he has met there, to state fully what he either saw or heard, and when to justify him in debarring his class from the particular field of instruction, he and the profession from all parts of the world have been pleased so long to enjoy.—I am, sir, your obedient servant,

HOLT DUNN.

THE CLERKENWELL CASUAL WARDS.

THE following further correspondence has taken place on this subject in the *Times*:—

"SIR—I must beg your permission to point out grave misstatements made by a Clerkenwell guardian, Mr. John W. Hopkins, in his letter in the *Times* of this morning. I did not cross-examine, in any manner whatever, the porter relative to the charge of drunkenness which he made against the casuals, and his statement was that 'he suspected they were drunk because they were lounging against the wall,' and his testimony

that they staggered when going into the ward was entirely uncorroborated. The police-constable said he thought they had been drinking, but as he did not see them move, never spoke to them and only glanced at them once by means of his lantern, and as he was to some extent interested in establishing this view of the case, he having been reported to his superiors for certain neglect of duty in connection with the affair, his testimony does not go for much in this particular. But, let it be observed, he does not say the men were drunk, for he stated 'they were perfectly capable of taking care of themselves.' Both the porter and he allowed that not one word was said about the men being drunk, and I was the only person charged with being intoxicated, and that by the porter ; for the policeman himself, the policeman on the next beat, and a tradesman who was brought to his door by an alarming fight in the neighbourhood—all attested to my perfect freedom from the slightest influence of drink. The tradesman also expressed his conviction that the two men were sober, and had the charge of drunkenness been made against them I should have called attention to their condition. My evidence on this point, however, can be further supported, if the Poor-law Board should desire to be further convinced.

"I did cross-examine the porter about a statement made to the guardians by his superior, the superintendent, and considered by them as a perfectly 'satisfactory explanation" of the charge. This was, that the policeman had pronounced the casuals and their friend to be 'all three drunk.' The porter denied authorizing his superior to say so.

"The loud knocking at the door of the ward was only loud after repeated softer knocks, which was continued at intervals of a few minutes, and I was justified in knocking louder when no one answered the lower knocks. I measured from the place spoken of by the policeman as where he heard the knocking, and instead of its being 130 yards distant, I found it less than 80 fair paces—about half the distance stated by Mr. Hopkins. The guardians had left no other means of communicating with the inside than by knocking or hitting the door with the fist.

"With regard to the steps I took to cause inquiry into this matter, I explained to the guardians that I took the readiest means that were at hand. The manner in which the majority of the guardians conducted themselves when I went uninvited on Thursday night (having previously communicated with the clerk), confirms me in my opinion that I took the best means. Of course I could not expect much courtesy from a body that, when called to order by the chairman on account of the Poor-law Commissioner being present, had a member to exclaim, 'I don't care for the Poor-law Commissioners, or anybody else.'

"Allow me to say, in regard to Mr. Hopkins's last statement, that I was officially informed the guardians would not permit any unofficial person to visit the wards.

"I can add another incident in illustration of 'man's inhumanity to man,' at the Clerkenwell casual wards. This evening on passing the wards at a little after five o'clock, I saw a poor ill-clad fellow waiting outside in the perishing cold of the streets. He told me he had made application for admission and had been told to come in another hour. I went and fetched a guardian, Mr. Poley, a gentleman whom I know to be a humane man. He knocked and asked the superintendent why the casual was not admitted. The superintendent owned to telling the man to come in another hour, and knew the Act of Parliament by heart, and quoted it to the effect that the casuals were to be relieved from six P.M. in these winter months ; but he owned, on further interrogation, that there was nothing in the Act which rendered it imperative to keep the ill-clad wretches who seek this relief in the bitter cold. It turned out that the guardians, in their 'hearty desire and anxious wish," to quote Mr. Hopkins, to carry out the law, have provided no place for the men casuals to sit in, and they have been obliged to take their food in the open yard. A place was found, at the instance of Mr. Poley, for the too early casuals to rest in, and a precedent established for taking others in.—I am, sir, your obedient servant, JOHN WHILE."

"SIR,—I hoped not to have troubled you with another letter, but the appearance of one in the *Times* of to-day from Mr. While has left me no alternative, I am still of the same opinion respecting the cases of the two applicants for admission—viz., that they were drunk, and consequently should not have been admitted into the casual wards, and I submit that my opinion is as likely to be correct and unbiased as Mr. While's, who was the plaintiff in the case, as we well know that persons in that position usually take views favourable to themselves.

"I do not consider that Mr. While has answered my letters in any particular, except that the distance I find from the casual ward outer door to Peartree-court to be on measurement 98 yards, and as I said about 130 yards, I made an error of 32 yards, but the fact of being heard by the policeman 98 yards proves that he had little regard for the slumbers of the many poor wayfarers sleeping in the wards at the time. He has given no reply as to my statement that the Clerkenwell guardians can have no interest in "keeping down the number of admissions" as that body is recouped by the Metropolitan Board, under the Houseless Poor Act, and his answer to my question, "Why he did not first make the Board of Guardians acquainted with the facts before he wrote to the *Times*" is weak and puerile. Mr. While admits all this tacidly by his proceeding, before he answered me, in search of fresh cruelties at the wards, in order to strengthen his reply to my letters. I repeat it, as one of the guardians, though Mr. While sneers and quotes my words, that it is our "hearty desire and earnest wish" that there shall be no infraction of the law in the management of our casual wards.

"In reply to the new case brought before your readers in Mr. While's letter of to-day, I beg to say that the poor fellow who is described as shivering in the forecourt of the Clerkenwell casual wards was a hale, hearty man, well-clothed, and had come from a vast distance—Hoxton ! As to the reason he gave that he was not admitted, I submit that the legal hour had not arrived for his admission, as the Act of 28th Victoria, cap. 32, gives the hours of between six in the evening and eight in the morning in the months between October and March inclusive. In addition to this, allow me to inform you, sir, that Clerkenwell deals more mercifully with applicants for admission than other parishes. Islington, St. Luke's, Shoreditch, &c., compel all applicants to the casual wards to go to the police stations for orders, and I have seen thirty or forty poor wretches shivering outside the police stations awaiting orders, and to none are those orders given before six o'clock, and the police are thus employed by the sanction—yes, and the recommendation, of the Poor-law Board. Any of your readers can convince himself of the truth of my statement by visiting the police stations at that time.

"I deny that the casuals have to eat their food in the open yard ; the place used for that purpose is an enclosed shed, not so warm and comfortable as it should be, but Mr. While knows that all the guardians have been compelled to make the best arrangements they could until they got a lease of the premises ; besides which, when one of the Poor-law inspectors visited the place he made no objection to it, previous to his certifying as to the fitness of the establishment for its purpose.

"Mr. While says nothing about the comfortable warm bath each has, nothing of the pint of hot gruel and ½lb. of bread, night and morning, each receives, nothing of the clean warm night shirt and comfortable bed on lath iron bedsteads and warm rugs to cover them, nothing of the genial gaslight—these things are never mentioned by writers of Mr. While's class, who have an eagle eye at finding out small defects, but are blind to such redeeming qualities as I have mentioned.

"I claim, sir, to have as warm a sympathy for the poor as he, and I shall be grateful to him, or any one, who will communicate any real ground of complaint against the officials of not only our casuals ward, but also of any other ramification of parochial Poor-Law Government in this parish. I shall not further reply.—Yours obediently,

JOHN W. HOPKINS, Guardian.

UNIVERSITY OF DUBLIN, TRINITY COLLEGE.

EXAMINATION FOR SURGICAL DEGREES.

MICHAELMAS, 1866.

DESCRIPTIVE AND SURGICAL ANATOMY.—PROFESSOR M'DOWEL

1. The relations of the lachrymal sac ?
2. Describe the temporal muscle, and mention its relations.
3. Give a description of the temporal arteries and nerves, and mention the several sources from which they arise.
4. The meaning of the term amphiarthrosis ? Give the most remarkable examples of it in man.
5. In what situations on the cranium is the application of the trephine inadmissible ?
6. Describe the linea alba, and mention the operations which it may be requisite to perform in this region.

7. Describe the progressive stages of ossification of the humerus.
8. Describe, anatomically, the successive steps of the operation of ovariotomy.
9. The relations of the femoral artery in Scarpa's triangle?
10. Describe the method of removal of the eyeball by enucleation.

DR. ADAMS.

1. The symptoms of a stricture of the œsophagus?
2. With what affection might organic stricture of the œsophagus be confounded?
3. State the post-mortem appearances of stricture of the œsophagus; and what other organs besides the œsophagus are usually found implicated.
4. Give the symptoms of organic stricture of the rectum.
5. Contrast these symptoms of stricture of the lower part of the rectum with those of a narrowing of the colon where it approaches the rectum.
6. Under what circumstances would you be unwilling to recommend the excision of a scirrhous tumour of the female breast?
7. What varieties of appearances have you noticed in the cutaneous covering of a scirrhous breast?
8. In performing the operation of laryngotomy in the case of an adult, what should be the size of a tube to be inserted in the opening made in the larynx?
9. What are the attentions to be paid after the operation of laryngotomy to the condition of the tube introduced?
10. When a morsel of food becomes suddenly arrested at the lowest part of the pharynx or commencement of the œsophagus, explain the cause of the sudden and sometimes fatal dyspnœa which supervenes. Is the cause of the dyspnœa mechanical or vital?

DR. R. W. SMITH.

1. Give a description of Pott's gangrene.
2. Mention the principal forms of mammary abscess.
3. Describe that form which has its seat in the gland itself.
4. What are the peculiarities of atrophic cancer of the breast?
5. Mention the various conditions which, if present, would prevent your removal of a cancerous breast.
6. What operations have been proposed in cases of cancer of the tongue?
7. Describe the characters of luxation of the head of the femur upon the pubis.
8. What would be your treatment in a case of mercurial erethismus?
9. What operations are performed in cases of entropeon?
10. Signs of what Mr. Hey has termed "internal derangement of the knee-joint."

EXAMINATION FOR MEDICAL DEGREES.

DR. R. W. SMITH.

1. Local and constitutional signs of hernia humoralis. ?
2. Mention the various modes of treatment.
3. Symptoms of strangulated hernia?
4. Signs of gangrene of the intestine?
5. Mention the modes of treatment you would have recourse to in a case of recent strangulation before proceeding to operate.
6. If, upon laying open the sac, you found the intestine mortified, what would be your line of treatment?
7. What dangers attend abscesses in the parieties of the abdomen?
8. What methods have been recommended for the local treatment of anthrax?
9. Write a prescription for a fermenting poultice.
10. What are the signs of a fracture of the patella? How would you treat this injury?

INSTITUTES OF MEDICINE.—PROFESSOR LAW.

1. What is Prout's classification of alimentary substances?
2. How does an adherent pericardium affect the nutrition of the heart?
3. How does position affect the number of the pulse?
4. How many different renal affections are comprised under the general designation of Morbus Brightii?
5. What is the pathological lesion in *ataxie locomotrice?*
6. What are the arguments that may be adduced to prove that typhus and typhoid fever are essentially different diseases
7. What are the lesions usually found after death in typhoid fever?
8. Who first described yellow softening of the brain?
9. What explanation did he give of it?
10. What surgical operation proved the correctness of his explanation?

MIDWIFERY, &C.—DR. SINCLAIR.

1. Fœtal head in the occipito-cotyloid position at the brim; describe the mechanism of the child's passage through the pelvis.
2. Demonstrate the utility of auscultation in determining the position of the fœtus in utero, at full term.
3. Mention the puerperal causes of death; of the mother and of the child.
4. Œdema gravidarum of the primiparous; its prognostic import, and the treatment for its removal?
5. Mention the least, and the most fatal form of complex labour as regards the mother.
6. Give a short history and describe the operation of symphyseotomy; also state your opinion with respect to its utility.
7. What is meant by metria?
8. Pruritus vulvæ, symptoms, causes, and treatment?
9. Nature, origin, and treatment of cephalhæmatomata?
10. Write the following prescriptions for a child two days old:—

I. A carminative with opium.
II. A purgative.

MEDICAL JURISPRUDENCE.—ROBERT TRAVERS, A.M., M.B.

1. How are hypostatic stains developed on the body, after death, to be distinguished from the results of confusion during life?
2. Enumerate the conditions that might be mistaken for cadaveric rigidity, and the diagnostic characters of each.
3. State the circumstances by which the progress of decomposition in the dead body may be affected, retarded, or accelerated.
4. A dead body having been found immersed in water, from what can you determine whether the death has been by drowning, or by some other cause?
5. Distinguish the coma of inebriation from that of apoplexy, and of concussion of the brain.
6. To what objections is *Reinsch's* process for the detection of an arsenical poison liable? and how are they to be obviated?
7. What forms of poisoning might be confounded with, or mistaken for, malignant (or Asiatic) cholera; and on what would the diagnosis be established?
8. By what characters observed in the anatomical autopsy, will death from exposure to H_2S, either alone, or with some other noxious gas, and but little diluted with atmospheric air, be recognisable?
9. To what is due the difficulty of determining whether wounds were inflicted during life, or after death?
10. What circumstances would you admit as criteria to distinguish *simulated* from real insanity.

BOTANY.—REV. DR. HAUGHTON.

1. Illustrate the following forms of stem: *articulate, nodose, triquetrous, quadrilateral, ribbed.*
2. Describe the law of Phyllotaxis in alternate-leaved plants.
3. Describe the *Digitalis purpurea*, referring it to its natural family, and stating its habitat.
4. Describe the officinal method of using the *Digitalis purpurea*, its adulterations, and physiological effects.
5. Describe the natural family *Alismaceæ*, illustrating your description by an account of the *Alisma plantago.*
6. Describe the *Linum catharticum*, giving the characters of its natural family.
7. You are required to distinguish between the *Caprifoliaceæ* and the *Rubiaceæ;* and to divide the latter into the *Stellatæ*, the *Coffeæ*, and the *Cinchoneæ*
8. Give an account of Forbes' theory of "specific centres," and illustrate it by examples drawn from the Vegetable Kingdom.
9. Draw figures of an *auriculate*, a *perfoliate*, a *connate*, and of a *pinnatipartite* leaf.
10. Draw a diagram showing the horizontal cross section of the leaf-bud, imbricated and quincunical, of a Poplar whose Phyllotaxis is two-fifths.

Medical News.

Apothecaries' Hall, London.—The following are the names of the gentlemen who passed their examination in the science and practice of medicine, and received certificates to practise, on Thursday, the 3rd of January:—Edward Nettleship (King's College), Kettering, Northampton-shire. On Thursday, the 10th of January:—William Edward Williams (St. Bartholomew's Hospital), Llanhilleth, Monmouthshire; Thomas Edward Stainthorpe (Middlesex Hospital), Hexham Abbey; Henry Summerhayes (St. Thomas's), Ealing, Middlesex. The following gentlemen also on the same day passed their first examination:—Walter Hart, King's College Hospital; John Chisholm M'Donald, Westminster Hospital.

The Hospital for Stone.—The *British Medical Journal* has been given to understand that Mr. Walter Coulson, having regard to the view which his colleagues have taken of his conduct in resuming office as Surgeon at St. Peter's Hospital, after receiving their support as candidate for the assistant-surgency of St. Mary's Hospital under the impression that he had finally ceased to be connected with St. Peter's, has resolved to resign his appointment at St. Mary's, reserving to himself the right of presenting himself anew as candidate for the vacancy occasioned at St. Mary's by his resignation.

Glasgow Lying-In Hospital.—At a meeting of the Directors of this hospital, held on the 3rd January, the following medical officers were appointed:—*Consulting Physician*, Dr. Andrew Anderson; *Consulting Surgeon*, Dr. George Buchanan; *Physician-Accoucheurs*, Dr. J. G. Wilson, and Dr. R. D. Tannahill; *Assistant Physicians and Dispensary Physicians*, Dr. Donald Dewar and Dr. George Yeamon.

Moller's Pure Cod-Liver Oil.—This oil, which is free from any disagreeable smell or taste, obtained the great Medal of the International Exhibition in London in the year 1862, and has been honoured with other similar testimonials bestowed in foreign countries. It is stated that the King of Sweden and Norway has presented the "Vasa" order to Mr. Möller, in recognition of the peculiar system by which the oil is prepared, and the physician to that Monarch has expressed, in a letter to Mr. Möller, his favourable opinion of its medicinal qualities and its easy digestibility. It is now introduced into Great Britain, and is sold by all chemists.

Medical Charities.—The funds of the Royal Infirmaries of Dundee and Perth have been increased by the munificient bequests of £1000 each from the Rev. John Spence, minister of Kinnaird, who has also left £12,000 for the purposes of founding as many bursaries in sums of not less than £50 each per annum to industrious students of the Universities of St. Andrews and of Edinburgh.

Harveian Society.—At the annual meeting of this Society, on January 3rd, the following gentlemen were elected officers for the ensuing year:—*President*—*J. E. Pollock, M.D. *Vice-Presidents*—T. Ballard, M.D.; *W. F. Cleveland, M.D.; *Ernest Hart, Esq.; J. B. Walker, Esq. *Treasurer*—Henry William Fuller, M.D. *Hon. Secretaries*—J. Brendon Curgenven, Esq.; Charles R. Drysdale, M.D. *Council*—Victor De Meric, Esq.; J. Eardley, Esq.; John Evans, Esq.; J. Gayleard, Esq.; *R. S. Jeffs, Esq.; J. Stewart Lamb, M.D.; James R. Lane, Esq.; J. Z. Laurence, Esq.; *H. W. Lobb, Esq.; Edwin Lowe, Esq.; *Duncan Menzies, M.R.C.P.; *J. Rushforth, Esq. The retiring President, Dr. Tyler Smith, read a very able address, embodying the report and suggestions of the Committee on Infanticide. So important was the report considered that it was unanimously resolved it should be printed.

* An asterisk is prefixed to the names of those gentlemen who did not hold the same office the preceding year.

Road Reform in Scotland.—A deputation of the Chamber of Agriculture waited upon the Lord-Advocate of Scotland on Wednesday, to present the resolution lately adopted by that body on the subject of road reform. Mr. Maclagan, M.P., Mr. Pagaw, of Cupar-Fife, who was the originator of the road reform movement in Scotland about 20 years ago, and Mr. M'Laren, M.P., addressed his Lordship in support of the petition of the Chamber for the introduction of a general measure, similar in principle to that adopted by several of the counties, and following out the recommendations of the Road Commissioners. The Lord-Advocate expressed his satisfaction in receiving the deputation, stated that he would bring the views of the deputation before Government, and that the deputation might be assured that any legislation on the subject which he would recommend would be in conformity with the principles recommended in the Commissioners' report.

Workhouse Surgeons.—It would appear that young medical men willing to accept workhouse appointments are very scarce, or that parochial authorities are very fastidious in their selection. Mr. Butt, the resident medical officer of St. Pancras Workhouse, having resigned his office, the vestry, with whom the appointment rests, directed advertisements to be issued for candidates to fill the vacant office, at a salary of £160, rising to £200 a year, with vaccination fees, and board and lodging. A special meeting of the vestry was held to receive applications from candidates, examine testimonials, &c., and to make a selection of two or three, from whom the vestry at its ordinary meeting was to elect one. Only one, however, of the candidates was considered up to the parochial standard, and fit to be sent to the vestry for election. It was then said, "We cannot send up only one to the vestry for election, for that would give them no choice; and as to that one, he is thirty-five years of age, and if he was a clever man wouldn't he have got on better by this time, and been above taking a workhouse appointment? So we had better reject them all and advertise again, and next time we may have better luck." It was accordingly resolved to reject all the candidates, and advertise again.—*Pall-Mall Gazette.*

Sanitary Act of 1866.—The regulations under this Act relating to lodging-houses are now coming into operation. Rules approved by the Home Secretary have been issued by several of the districts in the metropolis. Those issued by the Board of Works for the St. Giles's district are very stringent. Among the most important it is specified that no person shall let any house, or part of a house, in lodgings, or to be occupied in lodgings by members of more than one family, and in which more than two persons shall sleep in one room, until such house, and the person proposing to let the same, are registered in the office of the Board of Works. In no case will an accommodation of less than 400 cubic feet of space be allowed to each person. Persons letting such house, or part of a house, must have the walls and ceilings of every room, &c., thoroughly cleansed and limewashed at least four times every year. Cellars are to be cleaned out once a week, and limewashed as often as needed. The rooms are to be ventilated, &c., to the satisfaction of the medical health officer. Proper accommodation must also be provided for washing, and such a supply of water for the use of lodgers, with proper covered cisterns, as shall be satisfactory to the health officer. The cistern to afford at least fifteen gallons a day to each inmate. The dustbin must be emptied once a week, and for every twenty persons a separate water-closet is to be provided. Every house is to be properly drained. Every owner not resident in or near the registered house, must appoint, as agent, some person who is resident in or near to the house, to see that the regulations are carried out. Every house and room shall be open to the medical health officer for inspection between the hours of eight o'clock A.M. and ten o'clock P.M. Any persons violating the regulations will be liable to a penalty not exceeding 40s. for any one offence, with an additional penalty not exceeding 20s. for every day during which a default in obeying such regulations shall continue. The regulations issued by the Poplar district, also approved by the Home Secretary, are of a somewhat similar description; but there are additional clauses to the effect that no room the ceiling of which is on a level with or below the level of the footpath or roadway immediately adjoining, and no room used as a kitchen or scullery, and no room not lighted and ventilated directly from the exterior, and no room on the roof of the house not furnished with an open fireplace or flue, shall be permitted to be occupied as a sleeping-room, nor shall any underground room be permitted to be so occupied unless specially certified by the medical health officer as fit to be so occupied. The number of persons in each sleeping-room is to be determined by the cubical contents of the room; for instance, if the room is used only as a bedroom, there is not to be more than one person to every 300 cubic feet of air; if used as a sleeping room and also as a day room, then there is not to be more than one person to every 400 cubic feet of air. Persons of different sexes are not to occupy the same sleeping room, except one married couple, or parents with children under ten years of age. When a person is attacked with fever, small-pox, or other infectious disease, immediate notice must be given to the medical health officer.

THE HORRORS OF VIVISECTION IN FRANCE.—In a building or shed open to the air on one side lay six or seven living horses, fixed by every possible mechanical contrivance by the head and feet to pillars to prevent their struggling, and upon each horse were six or seven pupils employed in performing different surgical operations. The sight was truly horrible. The operations had begun early in the forenoon; it was nearly three o'clock when we entered the place, so that the poor wretches, as may be supposed, had ceased being able to make any violent struggles. But the deep heaving of the still panting chest, and the horrible look of the eyes, when such were remaining in the head, while the head was lashed to a pillar, were harrowing beyond endurance. The students had begun their day's work in the last vital parts of the animal; the trunks were there, but they had lost their tails, ears, and hoofs, and the operators were now engaged performing the more important operations, as tying up arteries, trephining the cranium, cutting down the more sensitive parts, on purpose, we were told that they might see the retraction of certain muscles by pinching and irritating the various nerves. One animal had one side of his head completely dissected, and the students were engaged in laying open and cauterizing the hock of same side when we entered.—*Veterinarian.*

Notices to Correspondents.

To our Subscribers.—In reply to numerous inquiries, we beg to say, that the INDEX for the last Volume is in course of preparation, and will be issued to our subscribers as soon as it has been completed.

In consequence of the illness of the Editor of our Irish Hospital Reports we are reluctantly obliged to issue this number without any material under this head. We hope to have them resumed in our next number.

Communications to the London Editor should be addressed to 20, King William-street, Strand; to the Edinburgh Editor at Maclachlan and Stewart's, South Bridge; and to the Dublin Editor, at 3, Lincoln-place.

Every MS. should bear the Name and Address of the Sender.

All Contributions are attentively considered, and unaccepted MSS. are returned on receipt of stamps for postage; but the Editors cannot be responsible for any accidental loss, nor can MSS. or replies be delivered on personal application.

Contributions should be *legibly* written, and only on one side of the paper.

When proofs are forwarded it is of the utmost importance that they should be corrected and returned without delay.

Communications respecting Hospital Reports should be addressed to "Editor of Hospital Reports Department," London, Edinburgh, and Dublin, respectively.

A Medical Student.—The pay of the Surgeons of the Peninsular and Oriental Steam Navigation Company on the Mediterranean or home lines commences at about £120 per year; that of those on the Indian lines at about £160 per do. The pay of the medical officers is progressively increased after certain periods of service. The surgeon receives remuneration for each life he examines for the Insurance or Superannuation Fund, chiefly established for the benefit of the officers, crews, and other employees, of the P. and O. Royal Mail, and some kindred services.

Mr. Richardson's letter has been received and will appear in our next Number.

Medical Diary of the Week.

ROYAL INSTITUTION.

TUESDAY.—Jan. 15th, at three o'clock, Rev. Charles Kingsley, "On the Ancien Régime as it existed on the Continent before the French Revolution."

THURSDAY.—Jan. 17th, at three o'clock, Rev. Charles Kingsley, "On the Ancien Régime as it existed on the Continent before the French Revolution."

FRIDAY.—Jan. 18th, at eight o'clock, Professor Tyndall, "On Sounding and Sensitive Flames."

SATURDAY.—Jan. 19th, at three o'clock, Rev. Charles Kingsley, "On the Ancien Régime as it existed on the Continent before the French Revolution."

Vacancies.

BIRMINGHAM GENERAL DISPENSARY.—Honorary Surgeon.

NORTHAMPTON GENERAL INFIRMARY.—Assistant to the House-Surgeon.

POOR-LAW MEDICAL SERVICE.

The area of each district is stated in acres. The population is computed according to the last census.

Chailey Union.—Third District; area 3103; population 1162; salary £16 per annum.

Cricklade and Wootton Bassett Union,—First District; area 10,760; population 2985; salary £40 per annum.

Tavistock Union.—Beerferris District: area 5850; population 2847; salary £22 6s. 8d. per annum.

Appointments.

ALLISON, J., L.K.Q.C.P.I., M.R.C.S., has been appointed Honorary Visiting Medical Officer to the Barrow-in-Furness Hospital and Dispensary.

ARMISTEAD, W., M.B., C.M., has been appointed House-Surgeon to the Barrow-in-Furness Hospital and Dispensary.

BEARDSLEY, A., M.R.C.S., L.S.A., has been appointed Honorary Consulting Surgeon to the Barrow-in-Furness Hospital and Dispensary.

ELLIS, T. S., M.R.C.S.E., has been appointed Surgeon to the Lying-in Charity, Gloucester.

EVANS, Mr. E. C., has been appointed House-Surgeon and Secretary to the Glamorganshire and Monmouthshire Infirmary and Dispensary, Cardiff.

HARRIS, Dr. GWYNNE, has been appointed Surgeon to the Royal Artillery, Popton Battery, Milford Haven.

SINCLAIR, W., M.D., L.R.C.P. and S.E., has been appointed Honorary Visiting Medical Officer to the Barrow-in-Furness Hospital and Dispensary.

STUART, R., L.R.C.P.Edin., has been appointed Assistant-Medical Officer of the Fisherton House Asylum, Salisbury.

SUTTON, Dr. H. G., has been appointed Fourth Assistant-Physician to the London Hospital.

STARK, P. W., M.D., L.R.C.P. and S.E., has been appointed Honorary Visiting Medical Officer to the Barrow-in-Furness Hospital and Dispensary.

TAEND, Dr. THEOPHILUS W., L.K.Q.C.P.I., M.R.C.S.Eng., &c., has been appointed Admiralty Surgeon and Agent at Southampton, *vice* J. King Sampson, F.R.C.S.Eng., resigned.

Births, Deaths, and Marriages.

Announcements are inserted without charge, and must in all cases be authenticated with the signature of the sender.

BIRTHS.

ARMSTRONG.—On December 18, at Fulford, near York, the wife of L. Armstrong, M.D., 13th Hussars, of a son.

BLOMFIELD.—On December 28, at 8, Rye-lane, Peckham, the wife of Dr. Blomfield, F.R.C.S., of a son.

CHAPMAN.—On January 2, at Old Friars, Richmond-green, Surrey, the wife of F. Chapman, M.R.C.S.E., of a daughter.

HOUGHTON.—On December 30, at 6, Mount-street, Grosvenor-square, the wife of H. G. Houghton, M.D., of a daughter.

SPICKERNELL.—On January 4, at Eastern-parade, Southsea, the wife of Dr. G. E. Spickernell, of a daughter.

WATSON.—On December 29, at Little Huthwaite, Wortley, near Sheffield, the wife of A. M. Watson, M.D., prematurely, of a son still-born.

MARRIAGES.

HUXTABLE—WALKER.—On January 1, at the Parish Church, East Budleigh, Devon, W. Huxtable, M.R.C.S., Belmont-villa, Budleigh Salterton, to Eliza, widow of the late Samuel Walker, Esq., Grove House, Sidmouth. No cards.

JOHNSON—FRECHEVILLE.—On January 4, at South Tedworth, Hants, W. Johnson, Esq., M.D., to Mary, eldest daughter of R. R. Frecheville, Esq. No cards.

JACOB—GREENE.—On January 10, at Athy, Augustus Hamilton, youngest son of Arthur Jacob, Esq., M.D., of Dublin, to Annie, youngest daughter of John Greene, Esq., Millbrooke, Mageney.

DEATHS.

ATKINSON.—On January 6, B. Atkinson, M.R.C.S.E., J.P. for the county of Bucks, at the Rookery, Great Marlow, aged 64.

CAHILL.—On December 21, A. Chaill, M.D., Surgeon 25th Regiment, at the Avenue, Berwick-on-Tweed, aged 84.

DESMOND.—On December 28, J. Desmond, M.D., Edin., at Nelson-place, Youghall, Cork, aged 79.

KITTSON.—On December 24, J. B. Kittson, L.R.C.P. Edin., of Newport, Co. Tipperary, aged 26.

MARTIN.—On January 7, G. A. Martin, M.D. Edin., M.R.C.P. Lond., at Belgrave House, Ventnor, Isle of Wight, aged 60.

PICKTHORN.—On October 21, Dr. G. R. Pickthorn, R.N., Assistant-Surgeon H.M.S. *Challenger*, at Auckland, New Zealand, in his 28th year.

ROSS.—On December 31, J. Tucker Ross, R.N., late Assistant-Surgeon Royal Naval Hospital, Simon's Bay, Cape of Good Hope.

VISE.—On January 6, C. Vise, M.C.C.S.E., at Spalding, Lincolnshire, in his 65th year.

The Medical Press & Circular.

STAMPED CIRCULATION FOR THE YEAR ENDING JUNE 30, 1866.

THE following extract from the Parliamentary Return recently published, represents the relative Issue of impressed Stamps of the principal weekly journals in Ireland, exclusive of the *General Advertiser*. The period included in the return comprises the half-yearly terms immediately preceding and succeeding the incorporation of THE MEDICAL CIRCULAR AND MEDICAL PRESS :—

Stamps Issued.	Annual Total.	Weekly Average.
Farmers' Gazette	115,150	2214
Medical Press and Circular	62,400	1200
Warder	42,500	817
Catholic Telegraph and Irish Sun	16,225	312
Nation	35,750	688
Weekly Freeman's Journal	30,000	577
Irishman	22,500	433
Agricultural Review	5,939	114
Weekly News	8,277	160
Irish People	2,500	48
Commercial Journal	1,470	29
Despatch	1,500	29
Mercantile Advertiser	——	—
Advertising Gazette	——	—

It will be perceived from this official testimony that THE MEDICAL PRESS AND CIRCULAR possesses the second largest Weekly Stamped Issue in Ireland. It is to be remembered that these returns only represent the Postal Issue, and entirely omits that part of the impression distributed by hand or through agents.

ROYAL COLLEGE of PHYSICIANS of LONDON.

FIRST PART OF THE PROFESSIONAL EXAMINATION FOR THE LICENCE.—The next Examination of Students who have completed Two Years of Professional Study at a recognised Medical School will commence on Tuesday, February 5th.

SECOND PART OF THE PROFESSIONAL EXAMINATION.—An Examination of gentlemen who are eligible for admission to the Second Examination for the Licence will commence on Tuesday, February 12th.

Registered Medical Practitioners qualified before January, 1861, are admitted to Examination under Special Bye-law.

Candidates are required to give fourteen days' notice in writing to the Registrar of the College, with whom all certificates and testimonials required by the Bye-laws are to be left at the same time.

Pall-mall East, 1867. H. A PITMAN, M.D., Registrar.

HOSPITAL FOR DISEASES OF THE THROAT,

32, GOLDEN-SQUARE, W.

CONSULTING PHYSICIANS :
Archibald Billing, M.D., F.R.S.; William Jenner, M.D., F.R.S.

CONSULTING SURGEON :
Sir William Fergusson, Bart., F.R.S.

PHYSICIANS :
Patrick Fraser, M.D.; Morell Mackenzie, M.D.

SURGEON :
George Evans, Esq.

Free Laryngoscopic Demonstrations are given every Thursday, at Two o'clock, by Dr. Morell Mackenzie.

Fee for three months' Medical Practice, £3 3s.; perpetual, £5 5s.

Clinical Assistants are appointed from the Perpetual Students.

GEO. G. WITHERBY, Hon. Sec.

ROYAL COLLEGE OF SURGEONS IN IRELAND.

NOTICE is hereby Given that the next QUARTERLY EXAMINATION will be held at the College, on TUESDAY, the 12th and TUESDAY the 19th FEBRUARY, at three o'clock P.M.

Candidates for Examination shall return their names to the Registrar of the College, and lodge their Fees and Certificates, on or before the 29th day of January.—By Order,

January 9th, 1867. JOHN BRENNEN, Registrar.

NAAS UNION.

KILDARE DISPENSARY DISTRICT.

MEDICAL OFFICER WANTED.—The COMMITTEE of MANAGEMENT of the above Dispensary District will, at their Meeting to be held at the Dispensary, at Kildare, on TUESDAY, the 22nd JANUARY, 1867, at the hour of Twelve o'clock noon, proceed to appoint a Medical Officer duly qualified, in accordance with the Order of the Poor-law Commissioners, at a salary of £80 per annum, exclusive of Fees for Registration and Vaccination.

The Gentleman appointed will be required to reside in the town of Kildare, and commence his duties on the 1st February, 1867.

Applications from Candidates, who are required to be in attendance, accompanied by testimonials, &c., will be received by me up to Twelve o'clock on the above day.

CHARLES BERGIN, Hon. Secretary.

Kildare, 2nd January, 1867.

GALWAY UNION.

The COMMITTEE of MANAGEMENT of the
SPIDDAL DISPENSARY DISTRICT,
Comprising the Electoral Divisions of Furbough, Spiddal, Killannin, Kilcummin, and Selerna, will, on WEDNESDAY, the 16th JANUARY next, at the Spiddal Dispensary, elect a duly qualified person, who shall reside within the District, to discharge the duties of

MEDICAL OFFICER, at a Salary of £70 a-year, together with Registration and Vaccination Fees.

Applications, with testimonials of qualifications, &c., to be addressed to A. W. BLAKE, Esq., Chairman of the Committee, Furbough, Barna.

The personal attendance of Candidates on the day of election is required.

29th December, 1866.

GALWAY UNION.

The COMMITTEE of MANAGEMENT of the
MOYCULLEN DISPENSARY DISTRICT,
Comprising the Electoral Divisions of Moycullen, Slieveaneena, and Tullokyne, will, on WEDNESDAY, the 16th JANUARY next, at the Moycullen Dispensary, elect a duly qualified person, who shall reside within the District, to discharge the duties of

MEDICAL OFFICER, at a Salary of £70 a-year, together with Registration and Vaccination Fees.

Applications, with testimonials of qualification, &c., will be received by NOEL T. SMITH, Esq., Hon. Sec., Drimcong, Moycullen.

The personal attendance of Candidates on the day of Election is required.

29th December, 1866.

NAAS UNION.

NEWBRIDGE DISPENSARY DISTRICT.

MEDICAL OFFICER WANTED.—THE COMMITTEE of MANAGEMENT of the above Dispensary District will, at their Meeting, to be held at Page's Hotel, Newbridge, on THURSDAY, the 17th JANUARY, 1867, at the hour of Twelve o'clock noon, proceed to appoint a Medical Officer, duly qualified in accordance with the Order of the Poor-law Commissioners, at a Salery of £100 per annum, exclusive of Fees for Registration and Vaccination.

The Gentlemen appointed will be required to reside in the town of Newbridge.

Applications from Candidates who are required to be in attendance, accompanied by testimonials, &c., will be received by me up to Twelve o'clock on the above day.

THOMAS H. MEADE, Hon. Sec.

Newbridge, 2nd January, 1867.

Apothecaries' Hall of Ireland, 40 Mary-street.

The following new Medicines and Preparations are manufactured in the Laboratory on the premises, and a supply constantly on hand :—

Sulphite of Magnesia, Syrup of Phosphate of Iron, Quina and Strychnia, Chlorate of Quina, Perchloric Acid, Concentrated Solution of Chlorinated Lime, Carbolic Acid, Pure and Crude—(the latter free from Sulphuretted Hydrogen)—Permanganate of Potash; and the other Disinfectants now in use.

CLINICAL LECTURES
DELIVERED IN
STEEVENS' HOSPITAL,
TOGETHER WITH
OBSERVATIONS ON PRACTICAL MEDICINE.

By Sir HENRY MARSH, M.D., Bart.,
PHYSICIAN IN ORDINARY TO THE QUEEN IN IRELAND.
Edited by J. STANNUS HUGHES, M.D., F.R.C.S.I.,
PROFESSOR OF SURGERY IN THE ROYAL COLLEGE OF SURGEONS IN IRELAND, SURGEON TO THE LORD LIEUTENANT'S HOUSEHOLD.

OBSERVATIONS ON THE TREATMENT OF THE DIABETES MELLITUS.*

(Continued from page 52.)

In the case just related, the cessation of accustomed perspiration, and the perpetual chillness, were symptoms which strongly indicated the necessity of remedies capable of recalling the suppressed and interrupted functions of the skin. The patient had enjoyed perfect health until the period of his long exposure to wet and cold. His habits of life had always been temperate; there was nothing, except the circumstances of his voyage, which could in any manner account for the disease.† It ought likewise to be noticed that, *previously* to the perception of any other symptom, the coldness of the surface and dryness of the skin existed. These symptoms did not at any time disappear until, after the repeated use of the vapour-bath, the functions of the skin were beginning to be restored; from the moment the pores were opened, the sensation of chillness ceased. How far the tincture of opium may have conduced to the efficacy of the remedy, it is not easy to determine. Once, after the opiated vapour-bath, the patient's sleep was much more heavy and protracted than usual. Such an effect might have been produced by the opium ascending with the vapour; this, however, is by no means certain. To establish the value of opium thus externally applied, numerous observations are necessary. Having once succeeded in bringing out a moisture upon the surface, it yet remains—a task of no small difficulty and importance—to maintain a permanently relaxed and moistened condition of the skin. To attain this desirable object, exercise and warm clothing, as remedies, claim peculiar attention. Riddal had not been working in the garden two days when the urinary secretion was diminished to one-third of its ordinary quantity; this change was accompanied with a corresponding mitigation of every other morbid symptom. With patients in the better ranks of life this remedy (which I conceive to be one of high importance) is practicable at every season of the year. Active exercise on horseback will excite perspiration, without producing fatigue.‡ To this remedy the patient will, at first, be extremely averse; he will himself, however, soon discover its value, and be inclined to persevere in its use. It will require a very considerable effort to overcome the inertness and languor which hang over the diabetic patient. If, however, the remedy be so managed as to determine powerfully to the surface, it will be accompanied by a degree of vigour and exhilaration sufficient to insure its being for the future persevered in; not so with blood-letting, opium, emetics, animal diet, and other remedies usually resorted to. The proposed plan of exciting diaphoresis by means of muscular action, is well calculated, not only to check the progress of the disease, but also to obviate the liability to a relapse. This is a matter of no small importance; for it rarely happens that a fully-formed diabetes (I mean that in which the urine is decidely saccharine) is radically and permanently cured.

This case shows, that a temporary diarrhœa diminishes the quantity and alters the quality of the urine. I have at present under treatment in the hospital a man named Hughes, labouring under the diabetes, for whom the following purgative was directed :—R. Pil. colocyn. gr. xii.; Ol. croton. guttas ii. M. Fnt. pilulæ sex; sumatur una tertiâ q.q. horâ, donec alvus soluta sit. This poor man, concluding that he could not take too much of a good thing, swallowed the whole at once: he was largely purged, but not nauseated; for several days afterwards his bowels remained tender and painful. So long as the diarrhœa continued, the urine was scanty and high-coloured; hence it would appear that, in the treatment of the diabetes, daily purgation should not be omitted. Sufficient diaphoresis once established, the bowels will easily yield to mild purgative medicines. From this case we also learn, that the sweating treatment ought not to be pushed too far, lest cutaneous eruption, troublesome and difficult of cure, should ensue. In Riddal's case, the exclusively animal food produced a high and dangerous fever—no uncommon consequence of such a regimen. In several of the recorded cases a similar effect was produced. In a young woman, named Galbraith, treated for the diabetes at the Whitworth Hospital by my friend Dr. Cuming, and now under my care, fever was twice caused by the animal diet. We may, I believe, with certainty conclude, that a full indulgence in animal food, while at the same time the body is not exercised, must end in the production either of some febrile disease or of local inflammation. I cannot therefore but object strongly to that mode of treatment, which would enjoin upon the patient at once a strict adherence to the animal regimen, and abstinence from exercise and bodily labour. I know not any disease in which a carefully regulated diet is of more importance than in the diabetes. The appetite is morbidly keen; its full gratification will certainly overload the stomach, and create much distress. Fulness at the epigastrium is a very frequent symptom, as also a sensation of heat and spasmodic constriction and tightness about the region of the stomach, these feelings are always increased after a full meal. In looking over the notes of several cases of this disease treated by Dr. Crampton,* I find that in one instance, blood was vomited. In the "Dictionaire des Sciences Médicales," an account is given of the dissection of a diabetic subject, performed by MM. Dupuytren and Thenard, amongst other morbid appearances, we find the following :—"l'estomac était extrêmement volumineux (cinq à six pintes de capacité); les vaisseaux de cet organe, très-dilatés, formaient, à la surface interne, un réseau très-rouge et plus développé que de coutume. Le duodénum, le commencement du jéjunum, et le cœcum étaient un peu plus rouges et un peu plus épais que dans l'etat naturel." The fulness and tenderness about the epigastrium, as well as the appearances in this almost solitary instance of dissection, would lead us to avoid every stimulating article of diet, and restrict the diabetic patient to moderate allowances of such food as is most easy of digestion. In Gal-

* Dublin Hospital Reports, vol. iii., page 431, 1822.

† The same cause in different individuals, according to their several predispositions, produces very different effects. I had under my care in the hospital a man who sailed in the same vessel, and was exposed to the same causes of disease as Riddal. He, in like manner, for some time afterwards, felt cold and chilly, but the disease with which he was attacked was an intermittent fever. It is remarkable that this man's ague, though it had resisted bark given in the very largest doses, yielded easily to a moderate course of mercury, aided by opium and antimonial wine. In addition to these remedies the Pediluvium was used every night, and free perspiration established. It may be worthy of remark that this person had been, nineteen years before, affected with the same disease, at a period when intermittent fever prevailed very generally at Drogheda and in its vicinity.

‡ It is important that the convalescent from the diabetes should not suffer even a single day to elapse without engaging in such exercise as shall determine powerfully to the skin. The advantages of exercise may be obtained in a variety of ways, such as in walking, dancing, fencing, &c. The patient who is fond of riding may procure that enjoyment in a riding-school or other similar enclosure, even during the severest weather.

* Whilst providing materials for clinical observations on the case of Riddal, who was then in hospital, Dr. Crampton kindly furnished me with notes of several valuable cases, which fell under his observation and treatment, both in hospital and private practice. In almost all of them, there was fulness about the epigastrium or uneasiness on pressure. In all, without exception, the skin is described to have been dry, harsh, anserine, or scaly. In several, cold and wet were the immediately exciting causes of the disease. Emetics, bleedings, purgatives, warm baths, and the hepatized ammonia, were the remedies principally employed. In all, the progress towards a cure kept pace accurately with the effects produced by these remedies in restoring the functions of the skin.

braith's case, the diet consists of bread, a small allowance of meat, and a larger proportion of well-boiled rice. This diet agrees well. Her common drink is the carbonated lime-water; which, she says, appeases her thirst more effectually than any fluid she has ever taken. This patient has been much benefited by the frequent application of leeches at the region of the stomach. She has now laboured under the disease upwards of four years. An exclusively animal diet obtained, in her case, a full and fair trial. Under its use the urine was rendered less abundant, and more deeply coloured; she did not, however, notwithstanding the diminished secretion of the kidneys, gain weight, or recover her strength and spirits. Her thirst was intense; she loathed animal food. To her opium also was administered in large and repeated doses; no sweat was produced; the relief resulting from it was slight and temporary. The vapour-bath, frequently repeated, has caused heat of surface, and an aggravation of the symptoms, and has altogether failed to excite perspiration. After repeated efforts, a perspiration has at length been produced.

This was effected in the following way: For the purpose of softening the dry and thickened cuticle, the whole surface of the body was rubbed over with oil;* the patient was then put into a warm bath, and the body washed with soap until the oil was completely removed. After this process had been three or four times repeated, a copious and general perspiration was excited. In the view of maintaining the cutaneous discharge, the Dover's powder is daily administered in small and frequently repeated doses, and the bowels kept free by means of the pil. gambog. comp. Under this treatment she is gradually gaining weight; her spirits, strength, and expression of countenance are improved; there is also a corresponding diminution in the quantity of urine; it is only now that the remedies are beginning to produce the desired effect. Her disease has been of long standing,† and is peculiarly obstinate. Her case, however, as well as that of Hughes (both of which I have now under treatment) I reserve for a future communication. It is remarkble that, in both these cases, the disease is connected with distress of mind. Hughes was in perfect health until he received a dreadful shock, in the sudden death of his only son, a fine lad of eleven years, who, whilst going on a message to his father, was caught in a mill, and in an instant torn to pieces; the poor man did not afterwards hold up his head; by degrees the symptoms of diabetes came on; and he is still low-spirited and broken-hearted.

There are not any functions in the body more closely connected and interwoven, the one with the other, than those of the skin and kidneys; by both these organs substances, either deleterious or useless, are carried off from the animal economy. When, from any cause, the secretion of one is increased, that of the other is proportionably diminished. They seem each capable of performing an action vicarious to the other; whence it would appear highly probable that very similar substances are expelled from the system by both these outlets. It is also remarkable that medicines, derived either from the vegetable or mineral kingdoms, possessed of diaphoretic properties, may, by a slight alteration in the mode of exhibition, be rendered diuretic. So closely connected are these two functions, that the same substances will act as excitants both to the one and to the other. This connection between the skin and the kidneys did not escape the notice of the accurate author of the Cyropede, as appears from the account he gives of the manner in which the Persian youth were educated:‡ he notices their moderation in food, and their "working off" (*ἐκπονεῖσθαι*) that food by exercise. He speaks of it as a disgrace to be seen retiring for the purpose of making water, or of any other evacuation; this, he observes, could not be the case, unless they made use of a restricted diet, and *consumed the humours by exercise.* Here is accurately described the plan of treatment by which the excessive flow of urine in the diabetes will most effectually be checked. By acting powerfully upon an organ, which is more intimately connected with the kidneys than any other in the body, the physician is furnished with a weapon capable of restraining, and even subduing, this formidable disease.

The remark has been made, that England, above all other countries, is that in which the diabetes is most prevalent. It has been attempted, in various ways, to account for this. A very general explanation is, that in these countries the disease is excited by the habit of drinking tea, punch, and other diluting fluids; but were this the real cause, the disease should abound still more in France, where the natives freely indulge themselves in the weak and acid wines of the country. Potatoes, the reputed cause of so many ills, have not been suffered to escape without blame; but I more than doubt that this disease has ever been caused by a vegetable diet; even were this the case, it surely would not account for its predominance in England, the country in which of all others the largest proportion of solid meat is consumed. No peculiarities of regimen will, I am persuaded, account for the greater prevalence of this disease amongst us: the true cause is of a very different nature, and may, I think, be traced to the fact that, diseases arising from atmospheric vicissitudes are more numerous in England than in any other country; amongst these the diabetes may be classed. Suppressed perspiration, especially if connected with distress of mind, fear and apprehension, does more frequently than any other cause, give rise to this complaint. It would be interesting to ascertain whether the disease be rarely or frequently found in steady and warm climates—in climates where the heat of the atmosphere maintains an habitually relaxed and perspiring state of the skin. This enquiry is interesting in a double point of view, both because it would throw light upon the connection between the skin and the kidney in the diabetes; and also, should it appear (as I suspect) that the true saccharine diabetes is a rare disease in warm climates, it would lead those who can afford to travel, and who have derived benefit from medical treatment, to quit for a while a country, in which every diabetic patient, however much the symptoms may have been relieved, is continually prone to relapse. It may be, that a residence of a few years in a warm climate would completely eradicate the disease. This is an important consideration, and well worthy the attention of medical men.

In the wonderful accounts which are to be found in the works of some authors (for there are persons, who, not satisfied with the ordinary operations of nature, love to go in search of the marvellous) of the immense excess of the egesta above the ingesta, it seems to have been forgotten, that excretion by the skin is at an end. All that should have been removed by secretion from the surface of the body is carried off by urine; besides, there is scarcely any pulmonary exhalation, and the feces are almost dry: the tears and saliva are scarcely secreted; even ulcers cease to discharge; so that all the humours of the body are passed off by the kidneys; the urgency of the thirst calls for a large and continual supply of fluids: the patient drinks more abundantly than his medical attendant is aware of. If then all these circumstances are unitedly taken into the account, it will, I imagine, be found, that there is not such an immense disproportion between the ingesta and egesta, as some would lead us to think. That the more solid particles destined for nutrition are carried off by urine, is certain. It is one of the essential characters of diabetic urine—whether animal or vegetable diet has been used—that the

* This process of oiling the surface was used by Dr. Rollo in the view of preventing cutaneous absorption: the object was unnecessary; the effect produced, in softening and relaxing the cuticle, salutary.

† This girl observed her hair to fall at the same time that the thirst, appetite, and flow of urine became inordinate. About three months ago her hair was shaved off. Since that period it has grown to the length of about an inch.

‡ *Καὶ νῦν δὲ ἔτι ἐμμένει μαρτυρία καὶ τῆς μετρίας διαίτης αὐτῶν, καὶ του ἐκπονεῖσθαι τὴν δίαιταν. Αἰσχρὸν μὲν γὰρ ἔτι καὶ νῦν ἐσι Πέρσαις καὶ τὸ ἀποπτύειν, καὶ τὸ ἀπομύττεσθαι, καὶ τὸ φύσης μεσοὺς φαίνεσθαι· αἰσχρὸν δὲ ἔτι καὶ τὸ ὄντα που φανερὸν γενεσθαι ἢ τοῦ οὐργαι ἕνεκα, ἢ καὶ ἄλλου τινὸς τοιούτου. Ταῦτα δὲ οὐκ ἐδύναντο ποιεῖν, εἰ μὴ καὶ διαίτῃ μετρίᾳ ἐχρῶντο, καὶ τὸ ὑγρὸν ἐκπονοῦντες ἀνήλισκον, ὥσε ἄλλῃ ποι ἀποχωρεῖν.*

specific gravity is raised beyond the standard of health ; hence nutrition is defective, and the body wastes ; there is also a degree of irritative fever, which, like hectic fever, interferes with and prevents the process of nutrition : this state of irritation in part accounts for the great value of opium in treating the diabetes.

Dr. Prout suspects that the urine is albuminous before it becomes saccharine ; this may be true ; and it is a fact important to ascertain, as the knowledge of it might enable the practitioner to meet the approaching evil, and prevent the full development of the disease.

Dr. Rollo mentions the case of a female, in whom habitually, and whilst in apparent health, the urine was insipid at one o'clock, after dinner saccharine, and natural in the evening. From this it appears probable, that however completely a diabetic patient may appear to be cured, the urine will ever after retain a slightly saccharine impregnation.

In a case which I lately treated, there was exhibited in a remarkable manner the power possessed by the vapour-bath of diminishing the urinary secretion. The patient to whom I allude laboured under pulmonary disease, the result of frequent and neglected colds : he had lived in habits of intemperance, and almost daily intoxication. In addition to the pulmonic symptoms, he was harassed by an intense thirst : he drank many quarts of cold and acidulated water in the course of the day ; his skin was scaly and dry ; the mucous membrane of his mouth parched and intensely florid ; the secretion of apparently healthy urine amounted habitually, in the course of twenty-four hours, to not less than sixteen pounds. For him the vapour-bath was directed. Though weakened and much emaciated he bore the bath without inconvenience : an abundant and general perspiration was produced ; the thirst ceased ; and the urinary secretion fell almost immediately to its ordinary standard.

The cure of a disease, so obstinate and fatal as the diabetes mellitus, ought never to be entrusted to any single remedy. A regular and systematic plan of treatment should always be adopted : and though the exciting and maintaining of an abundant and general diaphoresis, be the essential—the indispensable part of the treatment ; yet this measure, important as it is, should not supersede the adoption of other remedies : which, though comparatively of inferior value, are yet, by their combined action, capable of effecting much toward the removal of the disease. I shall conclude, then, by a brief enumeration of the several remedies, which by their united operation afford the best prospect of restoring the diabetic patient to the enjoyment of health.

First : When the disease is recent, and the strength not too far exhausted, blood-letting is a measure which should never be omitted. It may be necessary more than once to open a vein : the effects produced by the first operation will enable the practitioner to judge of the necessity of its repetition. Venesection will powerfully promote the action of those diaphoretic remedies to which principally the cure of the disease must be committed. Hughes was greatly relieved by a bleeding from the arm : it was followed by the tepid-bath ; an immediate and decided impression was made upon the disease.

Secondly : Leeches at the epigastrium will be found in many cases a valuable remedy. In the case of Galbraith, the local bleeding was attended with considerable advantage. When there is a feeling of internal heat, and the epigastrium is tumid and tender, and when there is a sensation of fulness, with what the patient describes to be "a gnawing feel about the stomach," the application of leeches at the epigastric region will be attended with considerable benefit.

Thirdly : The bowels of the diabetic patient should every day be freely evacuated. Copious alvine discharges have the effect of diminishing the urinary secretion : this is proved by the effects of the croton oil in the case of Hughes, and of the colocynth pill in that of Riddal. It may be desirable in some instances to excite a temporary diarrhœa by the action of purgative medicines. It will be necessary, however, to proceed with caution ; since any considerable derangement of the bowels will not fail to increase the severity of the disease. The safest course to adopt will be that of evacuating sufficiently, without violently purging the patient.

Fourthly : the diet of those who labour under the diabetes should be arranged with the utmost care. The process of digestion is rapidly and imperfectly performed : the stomach easily oppressed and overloaded. Food should, therefore, be given frequently, but always in very moderate quantity—in a quantity far short of that which the craving desire of the stomach seems to demand. It would, I am sure, greatly conduce to the patient's recovery, could he be prevailed on to restrict himself to a certain portion of food at each meal, and not on any occasion to exceed the number of ounces prescribed. The articles of diet which I have found to agree best, are broiled meat, soup, bread, well-boiled rice, and gruel. Fish, from its tendency to create thirst and drowsiness, I cannot recommend : potatoes I have observed frequently to disagree. As an ordinary drink, I have not known any allay thirst more effectually than the carbonated lime-water. Beef or veal tea, milk with lime-water, and wine very much diluted, have also appeared to agree well.

Fifthly : Every effort must be made by remedies acting directly upon the skin to excite that organ, and reproduce its suppressed functions. The vapour or tepid bath must be used perseveringly every day, or even twice a-day, until the vessels of the surface are excited, and the cutaneous secretion restored. The frequent immersion of the feet in warm water will sometimes succeed, even after the failure of more powerful remedies. At the same time the pulv. ipecac. comp. should be given in doses of eight or ten grains every third hour, till perspiration shall be fully established. A perspiring state of the surface should afterwards be maintained by means of warm flannel worn next the skin ; by active exercise ; and finally, if practicable, by a long residence in a warm climate. When the patient begins to regain strength, and appearances of amendment become decided, the cold bath will prove an useful tonic, and an excellent cutaneous stimulant. Under this treatment the patient will, if I mistake not, gradually recover his spirits and mental vigour, regain flesh and strength, find his thirst abate, his appetite grow less keen, and his urine improve both in quantity and quality. On the patient's own resolution and perseverance, much of the cure will depend : he must fully co-operate with his medical attendant. It would not be easy to name a remedy less irksome to the individual, or less injurious to the constitution, than daily and active exercise ; and if any remedy can diminish the liability to relapse, this, I am persuaded, will. The patient should, therefore, be particularly warned of the danger of laying aside too hastily a plan of treatment, which tends at once to remove the symptoms of the disease, and to guard against the danger of relapse.

Hospital Reports.

MERCER'S HOSPITAL.

HEPATIC ABSCESS SIMULATING ABDOMINAL ANEURISM.

By WILLIAM MOORE, M.D., M.R.I.A.,

PHYSICIAN TO MERCER'S HOSPITAL ; VICE-PRESIDENT OF THE COLLEGE OF PHYSICIANS, AND LECTURER ON PRACTICE OF MEDICINE, ETC., ETC.

GENTLEMEN,—Most of you whom I see around me must remember Maria N——, who was a patient some time since in this hospital, and who presented a type of disease of not very common occurrence and certainly of unusual interest. The details of the case I shall recapitulate for you :—

Maria N——, aged 28, a dressmaker, of admittedly intemperate habits, was brought to the hospital in June last. About ten days before she applied for admission she felt

what she described as a "throbbing lump" in her stomach. She also suffered from palpitation, short dry cough, constant pain in the back, which radiated towards the stomach, from rigors, night sweats, obstinate vomiting, especially after eating, and from total loss of appetite.

On examination, we found a tumour about the size of a hen-egg occupying the epigastric region. This tumour pulsated, and on applying the stethoscope over it a bruit could be heard which was lost in the upright position. Moreover, place the patient in what position you pleased, the pulsation was continuous. To test this we made the patient get on her hands and knees, still the pulsation remained, and this is a point worth your especial attention, for, as I hope to show you by-and-by the presence or absence of pulsation in this position is an important link in the differential diagnosis between hepatic abscess and abdominal aneurism. However, to resume, there was dulness over the hepatic region generally, and over the anterior and inferior region of the right side, where respiration was indistinct. The menstrual functions were regular, and the bowels free. After the patient had been a few days in hospital jaundice supervened. Now, the treatment we employed in this case was the effervescing saline mixture, with hydrocyanic acid, with the view of relieving the great irritability of the stomach. Ice was applied over the tumour, which was afterwards painted with a strong tincture of iodine, whilst five-grain doses of iodide of potassium were given in decoction of taraxacum three times a-day. Under this treatment the tumour, at the end of a month, had sensibly diminished, and the pain in the back and other symptoms had abated. At the end of six weeks the tumour could not be felt, and the girl's health was so much improved that she left the hospital, a faint tinge of jaundice only remaining.

Now, this patient was sent to hospital supposed to be suffering from abdominal aneurism, and, I confess, the first look at the case inclined me, as it did several gentlemen to whom I showed it, to arrive at the same conclusion, but a more careful examination shook this belief. As regards the pain in the back and jaundice, both these general symptoms might tally with abdominal aneurism ; so might the vomiting and irritability of the stomach if the enlargement of the vessel came in contact with that viscus ; but, in addition, we had rigors and night sweats, symptoms never found necessarily associated with aneurism, and which were of especial value as pointing to the formation of matter somewhere.

Next, as to the especial character of the tumour itself. It was about the size of an hen-egg, slightly flattened, and occupied the situation usually allotted to aneurisms of the abdominal aorta, whilst its pulsation was diastolic and eccentric. These special points, for so far closely resembling the signs of aneurism, tended to embarrass the diagnosis, and the presence of a bruit in the supine position, which became lost in the upright, still further obscured the case.

But there was one point which came to our relief, and that was the partial modification of the impulse by pressure on the tumour towards the right side. If with this important sign we had found absence or diminution of the impulse when the patient was placed on her hands and knees, the diagnosis would have been comparatively clear, for you will readily see that when a patient is placed in this position, an hepatic abscess or other non-adherent tumour falls forward from the aorta, and thus pulsation is lost, but in this instance there must have been some adhesions between the under surface of the liver and the great vessel which afforded a medium of pulsation. After some time, and giving due weight to the character of the constitutional disturbance in general, and to the modification of the impulse by pressure in particular, we arrived at the conclusion that the case was one of hepatic abscess, occupying the left lobe of the liver.

You may naturally ask me how did the contents of the abscess, which were of no trifling amount, disappear so stealthily as they did, and so favourably, and is this the usual way in which hepatic abscesses are disposed of?

The abscess may make its way through the thoracic or abdominal wall, in the latter case it usually points below the ensiform cartilage of the sternum, or it may point through an intercostal space, and eventually burst.

The abscess may burst to the stomach, and if so the rupture is followed by purulent vomiting or pus in the dejections or both. Should the abscess open into the intestinal canal, the symptoms are usually ill-defined, but the patient's attention may be arrested by the sudden subsidence of pain, and rupture into the peritoneum is in almost every instance followed by speedy dissolution. On the other hand, should the pus make its way into the bronchial tubes, this contingency is usually preceded by symptoms of pneumonia, as dulness on percussion, bronchial respiration, and rusty sputa, and when the rupture *actually* occurs copious purulent expectoration follows, even pure bile may occasionally be spat up. Again should the right pleural cavity be the receptacle of the abscess, the symptoms of ordinary empyema are set up, but rupture into the pericardium is an event of very rare occurrence, and when it has occurred, has been attended with a rapidly fatal termination.

Now, in the case before us, we have no positive proof that the abscess took any of these courses above-mentioned ; it might have opened into the intestinal canal or bile duct, and thus have been disposed of, but if so, I am inclined to think there would have been some more sudden and decided remission in the symptoms than what took place, and I think the pus in the dejections could scarcely have escaped us.

To be plain with you, I am at a loss to account for the exact *modus operandi* by which so gradual and favourable a termination was brought about in this unpromising case. Frerichs tells us that under favourable circumstances the suppurative process is arrested, the pus undergoing a retrograde metamorphosis, and thus the abscess gradually is reduced in size and cicatrizes, the symptoms steadily disappearing, and this seems to me the most feasible way to account for the disposal of the abscess in the present instance.

ST. MARY'S HOSPITAL.

FATTY TUMOUR OF THE NECK ; OPERATION.

Under the care of Mr. HAYNES WALTON,

SURGEON TO THE HOSPITAL, AND TO THE CENTRAL LONDON OPHTHALMIC HOSPITAL.

THE points of practical interest to surgeons in this case are two—the diagnosis and the manner of operating.

The tumour was situated at the side of the neck, just above the clavicle, between the mastoid muscle and the trapezius. It was large enough readily to attract notice.

The patient was twenty-five years old. The history merely told that a couple of years ago a swelling was noticed in the neck, and about the same time hard lumps appeared under the arm on that side. The tumour grew, while the lumps disappeared.

There had been difficulty in diagnosis, for the woman had been to two public institutions, and at both it was supposed that the tumour was made up only of enlarged cervical glands. Mr. Haynes Walton decided otherwise. He considered it to be a fatty tumour, and determined to remove it.

When the patient was brought to the operating theatre, Mr. Walton drew the attention of the spectators to the physical characters of the disease, and said:—"This is a case in which I can well understand that there might be a difference of opinion as to what the tumour was made up of. From a hasty examination, no doubt, most persons would suppose that they were touching merely lymphatic glands, and most certainly I should come to the same conclusion if I were to examine only a part of the mass. But, after I have scrutinized every portion of it, felt its general looseness, ascertained that the lumps are softer than glands would be, and taken into consideration that the tumour is increasing from below upwards, I say that it is fatty." Mr.

Walton ascertained the exact position of the jugular vein so as to avoid wounding it, made an incision in the long axis of the tumour, and cut through the skin. His diagnosis was accurate. Out gushed a lobule of loose yellow fat, a part of a true fatty tumour or lipoma. As he was dissecting in a very dangerous region he proceeded slowly, and laid open the capsule of the tumour to its entire extent.

As the capsule was adherent, dissection was required over the whole surface. None of it could be torn away, as may commonly be done. During the last stroke or two of the knife, two arteries were divided, and quickly secured by ligatures.

These remarks were made after the operation :—"Of course, gentlemen, I am gratified in being able to verify my diagnosis. I proceeded very slowly at first until I was able to ascertain the character of the tumour, because had I not seen fat I should have desisted, but as soon as a yellow lobule shot out, I went on quicker and with more confidence. Because everything has gone on smoothly to-day, you must not suppose that the operation was a very easy one, or that it was unattended with risk. I was dissecting deeply among very intricate parts, surrounded by vessels of large magnitude and of importance, for the ramifications of the tumour were many and deep. I wish to tell you the secret of my success, for if you know this you may act as well as I have done, but if you are ignorant of it you may get into great difficulty in attempting a like thing. I so conducted my dissection that every stroke of the knife told against the tumour ; in fact, the edge of the instrument was always toward its axis, and not away from it, so that I never divided anything I did not see, and I could not divide anything that did not come into the tumour or go out of it, so that if I had had blood-vessels in the closest proximity to the tumour, so long as they did not penetrate it, they were safe. If the point of the instrument had been once away from the surface of the tumour and out of sight, I might have divided anything. You saw that two small vessels were divided at the very last stroke of my knife. These were the proper vessels of the tumour—the vessels of nutrition—and as they were cut superficially they were very quickly secured by the forceps. By following this important rule, I have removed a large tumour from among intricate relations, without ever seeing any muscular tissue, or dividing any blood-vessels unconnected with the morbid growth."

The wound was brought together by sutures, and at this time, just a week after the operation, it is nearly quite healed.

Foreign Medical Literature.

TWO CASES OF ABSCESS IN THE ANTERIOR ABDOMINAL WALL, IN CONSEQUENCE OF THE PRESENCE OF A FOREIGN BODY WHICH HAD BEEN SWALLOWED, AND WHICH PERFORATED THE INTESTINAL CANAL.

Communicated by Professors SANTESSON and KEY.

Translated from the *Hygiea* for June, 1866,

By **WM. DANIEL MOORE, M.D.Dub. et Cantab., M.R.I.A.,**

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DALKULLAN STINA LARSDOTTER, aged 31, was admitted into the Surgical Division of the Seraphim Hospital on the 23rd October, 1865, for a tumour of doubtful nature, situated in the anterior abdominal wall.

Respecting her previous state she gave the following information :—She had always enjoyed excellent health. She was delivered on the 4th April, 1865, of a living boy, which died at the end of fourteen days. Her labour was difficult ; it lasted four days, after which she was obliged to keep her bed for a fortnight. After this time she recovered her strength, and soon felt perfectly well. The secretion of milk ceased gradually of its own accord ; menstruation was shortly re-established, and subsequently went on regularly. Towards the close of the following August the patient began to observe a hardness in the right side of the abdomen, for which she could not in any way account. At the end of a week the swelling had attained the size of the open hand ; was flat, with the surface looking anteriorly rather convex ; it was superficially tender to the touch, and caused such considerable pain that the patient was deprived of sleep, appetite, and capacity for work. After about three weeks, during which time she emaciated greatly, several small red elevations appeared over the hard part ; these were very painful, opened at the end of five or six days, and discharged a considerable quantity of pus and blood. This occurred in the last days of September. After this all pain and tenderness disappeared ; the patient could move about with tolerable ease, and was able to attend to her avocations. But as at the end of some weeks the tumour began again to increase in size, causing inconvenience at work, she sought for, and obtained admission into hospital.

The journal contains the following report of her state on admission :—The patient is of ordinary stature, rather emaciated, sallow complexion, muscular system flaccid. Heart and lungs in normal condition. Pulse full and even, about 80 in the minute. Liver and spleen not enlarged. Digestive organs in good order, except that the bowels have latterly been rather torpid. Tongue clean and soft. Appetite and sleep excellent. On examining the abdomen a swelling of nearly round form, extending from the symphysis pubis upwards to about two or three inches above the navel, is observed in its anterior wall. The swelling in shape resembles most nearly a loaf, with considerable convexity on its anterior surface ; it occupies principally the right side of the abdomen, at a distance of a finger's breadth from Poupart's ligament and the anterior spine of the ilium, extending with a rounded border to the left, about 2½" beyond the median line. To the touch it is firm, almost hard ; follows the abdominal wall in its movements, and is so well defined that its outer margin can almost everywhere be raised and grasped in the hands through the doubled integuments. The latter are so tense and drawn in over the convex surface of the tumour, that they cannot be lifted up in folds. On stretching the abdominal muscles the recti are observed to extend behind the tumour, or to be lost in its inferior part. When the abdominal muscles are relaxed the tumour becomes more movable, and as it were, lighter. Over the whole tumour there is a distinct intestinal sound on percussion, though rather dull in comparison with that of the surrounding parts of the abdomen. On the surface of its superior arch, to the right of the linea alba, are some fistulous, ulcerative openings, partly communicating with one another, of from half a centimètre to a centimètre in transverse diameter, filled with loose granulations, and secreting abundantly bloody pus. Through these openings a probe can be introduced to a depth of nearly 1½ inches, at a right angle to the abdominal wall ; in the horizontal direction it can be passed somewhat further around. The cavity in which the probe is moved seems irregular, here and there divided by cross and transverse imperfect partitions, and for the greatest part filled with a loose granulating mass, which is easily set bleeding. The skin over the whole tumour is strongly hyperemic, in spots reddish blue and discoloured, especially about the ulcerative openings already mentioned, and is very tender to the touch. In other respects, when the patient lies quietly on her back, the tumour causes neither pain nor any inconvenience.

On examination *per vaginam* the uterus is felt completely involuted, free and movable ; no change of position ; no depression or abnormal fulness of any part of the vagina. Nowhere is there any tenderness. Examination through

the rectum indicates nothing morbid. The urine is clear, of ordinary colour; its specific gravity is 1·023; its reaction is acid; it contains chlorides in abundance, but no albumen. Microscopic examination exhibits nothing abnormal.

Of what nature, now, was this tumour, and whence did it proceed? It was evident that it pertained principally to the abdominal wall, and that this was in its entire thickness implicated in the swelling. That the severe pains in the place, which the patient had experienced in the month of September, were caused by peritonitis, was very probable, but whether this had given rise to adhesion between the abdominal wall and the omentum or intestine situated within it, could not with any certainty be decided, and it must therefore be left an open question whether the tumour proceeded from one or other of the abdominal viscera, or stood in any closer or causal connection with these. Thus much was, however, certain, that even if this were the case, such a state of things did not produce any remarkable obstruction to the free movement of the intestines, or to the passage of their contents. Moreover, if the patient's statement could be relied on, the tumour had existed *before* the symptoms of peritonitis. Neither could she assign any cause. The only circumstance in her history which could possibly be brought into connection with the disease for which she had now sought admission to the hospital was the labour which occurred in April. But, although this is stated to have been severe, the patient nevertheless asserted that, from the beginning of May to the latter half of August, she had been in all respects perfectly well; and the examination of the uterus and its appendages, made immediately after her admission, did not indicate anything morbid in these parts. A limited peritonitic effusion, encysted between the abdominal wall and the omentum, with perforation of the former after a secondary phlegmon *(per contiguitatem)* in the abdominal integuments, also deserved consideration; but the question still remained unanswered—What was the cause of the primary swelling? Moreover there were one or two circumstances which did not fully agree with or find their explanation in such an assumption; in the first place, the unusual situation of the tumour towards the anterior abdominal wall *away from* the cœcum, iliac fossa, kidney, liver, and other parts, which usually serve as the starting point of such a process. Next the unusual and peculiar fact that, under such circumstances, the pus made way for itself through the abdominal wall in one of its strongest points—over and to the side of the rectus muscle on the right side—instead of, as usually occurs, sinking down into the iliac fossa or inguinal canal, pressing forward through this or in its neighbourhood, or perforating one or other of the adjoining intestinal loops. To a congestive abscess the disease had not the most remote resemblance, as no source of any such was anywhere discoverable. In a word, the cause of this in many respects remarkable swelling must for the present be left undetermined, and we were therefore compelled to make our treatment of the tumour and abscess purely symptomatic, without being able more nearly to decide the origin and proper nature of the affection.

Cataplasm to the tumour. The occasional use of decoctum frangulæ to promote the action of the bowels. At the end of a month, that is towards the close of November, the swelling had considerably diminished, the secretion from the abscess was more scanty than before, most frequently it was of a thin serous nature, not unusually mixed with some blood.

On the 25th of November it was noted: the patient is feverish, after having in the forenoon had slight shiverings continuing for half an hour. There is slight tension and tenderness in the epigastric region, but not in any other part of the abdomen. There are no thoracic symptoms. The pulse is 92. The urine contains a quantity of urates, but no albumen. The fever continued on the following days, though it was slight, and attended with complete remissions in the forenoon. Irregular transitory shiverings occurred from time to time. On the 1st December pain was felt in the left hypochondrium, extending thence down over the hip and into the iliac fossa—most perceptible on moving the left leg—without any material change in the skin or subjacent organs being discoverable on examination. In addition there were symptoms of a slight gastric catarrh, which, however, as well as the pain and fever just mentioned, shortly yielded to the use of tonics, with quinia and morphia at night, so that during the latter half of December and the first week in January, 1866, the patient felt comparatively well. The tumour steadily diminished, until, according to the note in the journal for the 13th January, 1866, it could no longer be considered such; the abdominal integuments could now be grasped in a fold in the place where the tumour had been situated; only two of the openings of the abscess still yielded a slight sero-purulent discharge; the others had been healed.

Towards the middle of January a change took place in the patient's state. Her appetite ceased; her tongue was furred; she complained of a bad taste in her mouth; she had daily, and sometimes several times a day, recurrent shiverings, followed by fever, headache, and colliquative sweating. The pulse was constantly almost, sometimes above, 100. Tenderness in the epigastrium and over the liver, the left hypochondrium, and the lumbar region. Occasionally hiccough and nausea. Tendency to cough, with a feeling of stitch in the left side. Physical examination elicited a dull sound on percussion, a feeble and remote respiratory sound with diminished pectoral murmur around the lower lobe of the left lung, up to about the level of the angle of the scapula. There was no dyspnœa. Corresponding to the two inferior ribs there was considerable tenderness on pressure, and the whole region over the spleen and down to the posterior half of the crest of the ilium appeared a week later somewhat swollen. That suppuration was taking place, could not be doubted, but it was more difficult to determine its starting point and proximate cause. Thus much, however, appeared to be clear, that it was not in any direct connection with the former swelling in the anterior abdominal wall, which had now entirely disappeared, and upon the integumental covering of which merely a couple of superficial, small ulcerous surfaces still uncovered with epidermis remained to mark the localities of the former fistulous openings. No fluctuation could as yet be discovered; but on one of the last days of January, that is about three weeks after the change for the worse took place, such was felt over the two inferior ribs, about one and a-half inches to the left of the spine. In this place an incision was now made, from which about a pound and a-half of a sero-purulent, rather bloody fluid was discharged. On the sides and in the bottom of the wound were seen lumps of the fascia lumbo-dorsalis and of the musculus sacro-lumbalis. In the direction forwards and upwards a probe could be introduced about four or five inches from the opening made, but not in towards the spine, which in other respects exhibited nothing morbid. No denuded bone could anywhere be discovered.

During the ensuing twenty-four hours an almost equally large quantity of similar pus was spontaneously discharged through the wound. On the 1st February it was noted that the discharge was considerably diminished; it was of the same nature as at first, but without blood. The dull sound on percussion over the lower part of the left lung had disappeared. The respiratory sound and the pectoral murmur were nearly restored. The tenderness over the two inferior ribs was quite gone.

From these circumstances, collated with the symptoms already noted, it was evident, as had appeared even on the first examination of the left side of the thorax to be most probable, that the dull sound on percussion, and the remoteness of the respiratory murmur depended not on any effusion in the pleura, but on an encysted exudation, possibly an abscess, situated beneath the diaphragm, pressing the latter upwards, hindering its descent, and so preventing the lung from filling and extending downwards; whence this exudation or this abscess directly proceeded, it was more difficult to decide, for the place where the purulent col-

lection afterwards presented, was equally in favour of a retro-peritoneal abscess resulting from perinephritis, and of an abscess around the spleen—a diffuse purulent peritonitis. The symptoms referable to the diaphragn and stomach—the hiccough, nausea, epigastric tenderness—however, make the latter assumption the more probable.

The secretion from the abscess was during the following three weeks extremely inconsiderable, and the tenderness in the left hypochondrium had entirely disappeared. The patient's general state was comparatively better than before, but her emaciation was considerable, her appetite was variable and most frequently she had none ; the tongue was furred, while rigors, varying in intensity, and followed by most frequently short and slight reaction, occasionally occurred, at intervals sometimes of one, sometimes of several days.

The pulse was, however, during the whole time, in addition to weakness proportionate to the state of the general strength, quicker than natural, about 100 ; towards evening it was still higher. The bowels were irregular, usually torpid. On the 20th February, diarrhœa supervened with copious watery stools, which, with an occasional interval of twelve or twenty-four hours, afterwards continued, especially at night. There was no tenderness or pain in the abdomen or anus. Suspecting the possibility of perforation of the intestine from the abscess, inasmuch as no remedy seemed to restrain the obstinate evacuations, the latter were examined, but exhibited no admixture of pus, gangrenous fragments or other unusual constituents. Their appearance was like that seen in intestinal catarrh with clear semi-transparent mucous masses from the follicles of the large intestine ; they were pretty strongly tinged with bile. The patient's strength, which had already been considerably diminished, sank rapidly under this symptom. Over the posterior portions of both lungs, copious, loose, and rough râles were heard. The patient did not complain of pain or tenderness anywhere ; only when the attacks of diarrhœa were very frequent, did she towards the close complain of smarting and burning when at stool. After languishing for some time, and without the accession of any new symptoms, she died at two o'clock P.M., on the 4th of the following March, being the thirteenth day after the setting in of the diarrhœa.

Dr. Key communicated the following respecting the changes met with on post-mortem examination :—

The body is extremely emaciated. There is slight œdema of the lower extremities, particularly in the left. On the left side of the spine is found, in the upper part of the lumbar region, an opening of one and a-half inches in length, leading into an irregularly ramifying abscess, which, throughout a tolerably great extent, undermines the skin. Upon opening it the abscess is found to be continued by some slender concurrent canals through the muscular structure in a direction upwards to the tenth and eleventh ribs, which near their angles are each on the under edge through a small space denuded, presenting a tolerably smooth and even surface of bone, with greatly softened periosteum about it. Beneath the two denuded margins of the ribs a probe can be introduced for its entire length into the abdominal cavity, On the inferior half of the right side of the anterior abdominal wall, from the level of the navel down to the crest of the ilium and Poupart's ligament, are seen several small reddish grey crusts, and the skin cannot here be drawn over the muscular structure. On dissecting it away it is found to be connected with the muscular wall itself by a firm, sclerotic, and in greater part slate-grey connective tissue, in which are found here and there small islands of the original paniculus adiposus. Here and there are small foci filled with a whitish grey, friable earthy mass (half dried pus). On cutting through the abdominal wall in an oblique direction from the umbilicus out to the anterior superior spine of the right ilium, both the muscles and fasciæ are in general found of a steel-blue colour; the former traversed by thick, sclerotic filaments of connective tissue, on which account the different layers cannot be separated. About midway between the umbilicus and the spine of the ilium, is found in the muscular wall a sinuous abscess, about the size of a pigeon's-egg, containing a black *pin*, bent nearly at a right angle. The abscess, which is about two inches in length, is connected by a couple of slender passages, with as many of the subcutaneous foci already mentioned. Corresponding to the extent of the abscess a loop of the ileum is attached on the inside of the abdominal wall, by means of extremely thick and strong adhesions of a slate or reddish grey colour.' The abscess itself, which in its middle portion lies in the muscular structure, passes both at its upper and lower extremity not merely into the peritoneum, but perforates this membrane, and is continuous, by means of adhesions, with the intestine. Inferiorly it ends in these adhesions, but superiorly a probe can be introduced from the abscess into the very calibre of the attached intestinal loop. On slitting up the intestines, several small dark blue spots are found, through an extent of two inches, on the mucous membrane of the most strongly adherent portion. In one of these spots we meet with an oval ulcer, 6 mm. ('23622″) in length, which perforates the mucous membrane, the latter being, through a considerable extent, undermined about the ulcer. The edges of the ulcer are slightly swollen. The muscular coat, which forms the fundus of the submucous abscess, is perforated by a hole of about the same size as that in the mucous membrane, and this opening leads directly into the upper extremity of the abscess in the abdominal wall already described, in which the pin lay.

On closer examination of the other dark blue spots, in number eight, they are found to have in general an extended transverse direction. One of them represents precisely the form of a pin. With a length of 19 mm. ('74803″) it is only a little broader than the pin, and exhibits no loss of substance. It seems as if the pin had been driven in under the mucous membrane, but again set free. In one of the spots the mucous membrane is gone, terminating at the periphery in tolerably sharp and not swollen edges, which are attached to the dark fundus of connective tissue. In another the same state exists, but the edges of the mucous membrane here project by some fragments over the ulcer, the fundus of which is formed of reddish black granulations projecting from the muscular coat. A smaller opening in this fundus leads into a small cavity, situated partly in, partly without, the thickened muscular coat, without communicating with the abscess in the abdominal wall. On the other spots the mucous membrane is intact. In the abdominal cavity the intestines are otherwise found in many places adherent to one another by means of whitish grey or reddish grey, rather friable pseudo-membranous new formations, and the peritoneum, both visceral and parietal, is over surfaces of various extent, covered with a similar cuticular, pseudo-membranous new formation, which in many places assumes an intensely red colour, exhibiting numerous fine, ramified, congested vessels, passing over from the peritoneum itself. The peritoneum of the small intestines is in general remarkably thick, softened and fragile. In the true pelvis the organs are attached to one another by old false membranes, some of which are firm, greyish-white, while others are lumpy, of a dark blue colour, and in a broken-up condition. In and between the lumps lies an ashy or clay-like mass. In some places the change has invaded the substance of the uterus, which on the surface in some parts presents small spots of a steel-blue colour, while in others it is penetrated by small, greyish-white, ashy foci. The rest of the uterine substance is rather sclerotic, of firm consistence, and of a whitish-grey appearance. The right tube, whose walls are considerably thickened, is thrown back, in a very tortuous state, behind the fundus uteri. At its outer extremity it is dilated nearly to the size of a pigeon's-egg, and it is filled with thick, puriform, greyish-yellow matter. The right ovary is sclerotic. The walls of the left tube also are thickened. The left ovary is as large as a goose-egg, closely studded with abscesses of various sizes, which are filled with a thick, pale, clay-like matter. On the posterior wall, and in the fundus of the recto-uterine fossa, the peritoneum is in great part hypertrophied, presenting a number of projecting steel-grey lumps. This hypertrophied condition

extends forwards in the tissue between the rectum and vagina for an extent of three centimètres. The rectal wall is here perforated by three small adjoining openings, through which the cavity of the true pelvis communicates with the calibre of the intestine. Higher up, too, corresponding about to the middle of the body of the uterus, the rectum is perforated by a hole which readily admits the passage of the little finger. On slitting up the intestine the mucous membrane is seen in the perforated parts to be in one place completely abraded, in another throughout a great extent undermined with gangrenous lumpy, not swollen, edges, lying loose over the steel-blue muscular coat surrounding the perforations. On slitting up the whole of the large intestine, the mucous membrane is found in general rather thickened, with large solitary glands for the most part burst. At the flexura lienalis the mucous membrane is abraded in spots varying in size from that of a pea to that of a hazel-nut, with lumpy, undermined, thin edges. The fundi of the ulcers are formed of a thin layer of submucous connective tissue, which is in spots of a slate-grey colour. At the hepatic flexure some similar changes are also met with, but the mucous membrane is here in general persistent, although undermined, loose, opaquely discoloured, and tubularly perforated. In one place, in the bottom of such a submucous abscess, the muscular coat is perforated by a small hole, which leads out into an abscess of the size of a hazel-nut, which, with its ashy contents, is situated in the attachment of the mesentery. About this abscess the mesentery is of a slate-grey colour, with yellowish, white, and softer striæ (purulent infiltration, half-dried.)

(To be continued.)

Proceedings of Societies.

SURGICAL SOCIETY OF IRELAND.

FRIDAY, JANUARY 4, 1867.

Dr. BANON, Vice-President of the College, in the Chair.

PRIMARY CANCER OF THE KIDNEYS; TUMOUR (MALIGNANT?) IN THE PROSTATE GLAND.

DR. FLEMING presented specimens illustrative of the above lesions, and having mentioned the previous and existing symptoms of the case connected with them, entered into the details of the morbid appearances, stated the *doubts* entertained respecting their histology, and alluded to the remarkable isolation of the disease in the kidneys, and the treacherous latency of its progress and development, all complaint having been referred to the bladder and its immediate locality. Hæmaturia did not present itself as a symptom throughout the whole progress of the disease, neither were there any morbid conditions of the urine to indicate its presence. The history of the case, as learned, was not as satisfactory as could be desired. The prostatic tumour did appear to be of "cystic" development, and somewhat like that of the "chronic mammary tumour" of Professor Colles and Sir Astley Cooper, as specially noted by Mr. Paget. The question was, however, debatable.

FEMORAL HERNIA OF UNUSUAL SIZE.

By EDWARD HAMILTON.

I am indebted to Mr. Colles for the privilege of presenting to the Society this cast, which illustrates a case of femoral hernia, in which the protrusion attained an unusually large size. The patient, a female about forty years of age, was admitted last week to Steevens' Hospital, labouring under the symptoms of strangulated hernia, constipation, vomiting, tympanitis, cholicky pain, which she states to have existed for four or five days previous to her admission, so that if we recognize the distinction adopted by some surgeons between strangulated and incarcerated hernia, we should rather refer the case to the latter variety. The early history of the disease showed, that about ten years since, she strained her right leg in leaping from a height, which obliged her to keep her bed, at which time she observed the tumour, then not larger than a walnut. She had suffered from irregularity of the bowels, but no absolute obstruction until the present attack. Repeated attempts at taxis had been made previous to her admission. She was at once attended by the resident-surgeon, Dr. Tyner, by whom the hernia was reduced after prolonged and careful manipulation, the bowel suddenly returning with a loud gurgling sound. The functions of the intestine have been perfectly restored, although a considerable mass of omentum appears still to remain in the sac. I would not think of trespassing on the time and attention of the Society with the details of a mere case of femoral hernia, but I think the size of the tumour, which, before reduction, was fully twice as large as the cast represents, suggests two or three reflections to the practical surgeon—first, how the femoral ring, surrounded as we know it is by dense unyielding fibrous structure, can adapt itself to the passage of so large a mass ; secondly, how the femoral vein, lying immediately to its outer side, escapes pressure, even though it is protected by a septal wall of fascia, and in this case there was no evidence of venous congestion in the limb below ; and thirdly, the important question as to how so large a sac should be dealt with in a hernia of such long standing had operation been unavoidable.

URINARY CALCULI, WHICH HAD ESCAPED SPONTANEOUSLY THROUGH THE URETHRA—SUGGESTIONS AS TO CLOVER'S APPARATUS FOR THEIR REMOVAL.

Dr. FLEMING exhibited a large collection of urinary calculi, the majority of which had escaped *spontaneously* through the urethra. He alluded to the diagnostic peculiarities of each class of calculi — as renal, vesical, or urethral. He also exhibited his modification of Clover's apparatus for the removal of lithotritic detritus, and recommended its application, with the substitution of a suitably formed gum-elastic catheter, in cases as the above. He considered it a much safer mode of proceeding, in many instances, especially *when the urethra was previously largely dilated*, than that usually adopted of "crushing" with the lithotrite.

CASES OF ANOMALIES IN ANATOMICAL STRUCTURE.

By ALEX. MACALISTER.

It seems to be a natural law, that there is a tendency during the process of development, towards the perpetuation of embryonic forms, and this we find to be a fruitful source of anomalies in structure. To this law may be appended a corollary, that those organs which in their adult condition present the greatest deviations from their typical or fœtal state, will be the most liable to exhibit reversions to original conformation, and consequently will be the most irregular. The arch of the aorta and its branches exhibit anomalies, perhaps more frequently than any other portion of the vascular system, indeed, perhaps more frequently than any other portion of the body ; and when these are considered in the light of the embryological and zootomical relations of this vessel, much interest is added to the task of collecting such varieties. In the examination of the body of a female subject in the dissecting-room of the Royal College of Surgeons, I met with the interesting specimen which I have at present to describe. The individual was a spare, rather feebly-developed, middle-aged woman, about five feet three in height, narrow-chested, and with a prognathous conformation of skull. On opening the cavity of the thorax and dissecting the front of the neck, the following appearrances were observed :—

The heart was a little hypertrophied, and its left ventricle gave off the aorta in its normal position ; this vessel after sending off the two coronaries and arter ascending to the right as usual, turned upwards, backwards, and to the left side, giving off in the situation in which the left common carotid usually arises, a large common trunk, seven lines long, a little to the left of the position in which the sinus of Morgagni is generally found. This common trunk,

which in calibre resembled the arteria innominata, after passing upwards, backwards, and to the left, divided into the two carotids. The right vessel crossed the neck rising obliquely backwards and to the right, slightly sinuous in its course and lying on the sixth and seventh rings of the trachea, concave backwards and to the right side below, assuming its normal position opposite the second ring of the trachea or the lower border of the right lateral lobe of the thyroid body. The left carotid passed upwards from its origin nearly in its usual position, as the point of bifurcation of the common carotid trunk was directly on the level of the left border of the trachea, and below the level of the sterno-clavicular articulation opposite the lower border of the cartilage of the first rib. The left subclavian trunk was normal in position and in the arrangement of its branches, but the right arose from the transverse portion of the aortic arch just where it turned downwards posterior, and to the left side of the left subclavian, and behind and above the point of insertion of the ductus arteriosus, it passed upwards and to the right side posterior to the œsophagus and trachea, was crossed at its origin by the left recurrent laryngeal nerve. The right pneumogastric nerve passed over it as it emerged from behind the œsophagus and the right recurrent laryngeal did not hook round it in the usual position, but passed directly inwards to the side of the larynx. The apex of the right lung was notched by it, and it crossed behind the trachea corresponding to the eleventh, twelfth and thirteenth rings.

Among the similar instances of irregularities in the branches of the aortic arch, cases are recorded by Zagorsky* of a common trunk on the left side giving origin to the two carotids and the left subclavian, a rare condition which I have seen myself once.† Instances are recorded likewise by Haller and Meckel‡ of the two carotids arising by a common trunk, an arrangement which I have likewise seen and which is found to be typical in the elephant. In this animal, however, the subclavian arise on either side of the common trunk. Walter, is as far as I am aware, the only anatomist who has ever noticed an irregularity similar in most respects to that in the present instance, and his description is to be found in the Memoirs of the Berlin Academy for 1785. Mr. Green,§ in speaking of the tendency of arterial deviations to the left, describes a specimen in which the right carotid gave off the right vertebral and crossed the trachea: "The left carotid and subclavian arose nearly from the same point, the right subclavian was detached from the back part of the arch a little below the left subclavian, and passed to the right side behind the œsophagus and trachea."

The fact of the origin of the right subclavian to the left of the other branches has been noticed by several anatomists, and Professor Harrison‖ says, regarding it, that in such cases there is no innominata, and the right carotid arises from the arch in its place; this, however, is not confirmed by our present specimen. The surgical importance of this variety is considerable, as its relation to the œsophagus might lead to serious complication, either from accident or disease, as in the celebrated case of Mr. Kirby's, in which a fish-bone pierced the subclavian as it passed behind the œsophagus.¶ The right carotid in crossing the trachea might give rise to dangerous complications in the operation of tracheotomy, especially in children.

Although the embryological relations of this variety have been very ably discussed by several observers, yet that portion of the subject has scarcely been exhausted. Mr. Hart has described a corresponding case in the *Edinburgh Medical and Surgical Journal* for April 1826, and he has called attention to the important fact of the relative position of the inferior laryngeal nerve to the anomalous right subclavian, as showing the true reason why in man we find the right pneumogastric giving off its recurrent branch round that artery, and, in fact, why the inferior laryngeal should be recurrent at all, for as the embryonic cerebral vesicles are developed from the outer layer of the blastoderm, on a plane anterior to the middle or vascular lamina in which the primordial bronchial arches are formed and the rudimentary laryngeal apparatus is originated posterior to these embryonic arteries, then, as the vertical development proceeds, the laryngeal nerve cords going from before backward will be hooked round the fourth arch, or that which becomes the arch of the aorta on the left and the third, or that which is developed as the subclavian on the right, both of which are the second lowest of the persistent arches, and thus when the right subclavian passes behind the trachea, the nerve and viscus being on the same side of the artery, of course the former will pass directly to its destination.

The nature of the present instance seems to depend upon the arrest of the usual obliterative development in the formation of these vessels, so that the common carotid trunk is derived from the prolonged central stem giving off the first pair of bronchial arches. The second pair is, as usual, obliterated; the third pair is developed as the subclavians, whose fœtal community of origin explains the proximity of their trunks, although it is hard to account for their crossing, or the passage of the right trunk behind the trachea. The fourth arches then form on the left the arch of the aorta, while on the right it is represented by the ductus arteriosus and right pulmonary trunk. We have then the left pulmonary as the representative of the left fifth arch, while the right fifth is absent.

It may, perhaps, be worthy of note that in the same subject the molar teeth were very much flattened and ground, an appearance very common in the teeth of the ancient skulls found in the peat and recent deposits in Ireland. In the lower jaw she had but two molars on one side and one on the other, and there was no appearance of diastema or gago, so apparently this was the entire number which she possessed below the upper teeth—sixteen in number; and the crowns of those molars which had no opponents in the lower jaw, were much less worn than those which were in contact with inferior teeth.

In another subject in the room, a little before the already described specimen, the superior profunda, inferior profunda, circumflex, and subscapular arteries arose by a common trunk from the back of the first stage of the axillary artery, the abnormal vessel taking the normal position of that artery, while the real trunk lay anterior to all the other parts in the axilla. This anomaly is not of very rare occurrence. I have on several occasions met with it before.

I have also seen several specimens of abnormal muscles, which might be worth examination. One is a distinct and well-developed example of the infra-spinatus secundus, or subscapulo-capsular, passing from the axillary costa of the scapula to the lesser tuberosity of the humerus external to the capsular ligament anterior to the long head of the triceps, of which I have given a fuller description in the proceedings of the Royal Irish Academy for July, 1866. It has been also met with by Gruber and Henle.

I have likewise to exhibit in the same subject a double coraco-brachialis, the second or shorter piece being quite separate from the first or larger portion; the former arises from beneath the coracoid process, and is inserted into the humerus in common with the insertion of the latissimus dorsi. It will be seen to be quite separate from the capsula of the shoulder. Mr. Wood, who has met with this slip four times, describes it as being connected to the capsular ligament. Cruveilhier and others have also described it. The first-named author has given an admirable account of its relations in the *Journal of Anatomy and Physiology*, vol. i., No. 1., p. 47.

Another and interesting variety is a fusion of the flexus of the fingers and thumb, in which the indicial portion of the flexor profundus digitorum is completely and closely connected to the flexor pollicis by cross-connecting slips. Gautzer has mentioned this as a rare occurrence, and it is not an uncommon arrangement among the quadrumana.

I might mention one other remarkable case which I

* Memoire de Academ. des Scienc. de Petersburgh, 1809, tom. i., p. 384.
† Haller de Corporis Humain Fabuea, tom. iv., p. 8.
‡ Meckel's Anatomie, tom. ii., p. 322.
§ Green, Varieties of Arteries, p. 7.
‖ Dublin Dissector, vol. ii., p. 407.
¶ Houston's Catalogue of the Museum of the Royal College of Surgeons, p. 79.

found in the dissecting-room a few days ago—namely, the crossing of the common carotid artery by pneumogastric nerve in the middle of the neck ; the nerve ran from without inwards, across a curve in the vessel, again crossing it below to resume its original position.

Reviews.

EDINBURGH MEDICAL JOURNAL. January, 1867.

The present number contains four original communications, five reviews, and other miscellaneous matter. The opening article, by Dr. Scoresby-Jackson, is a well-written and most interesting paper on "Amnesic Aphasia ;" and details particulars of a case of typhus fever which was followed by right hemiplegia and loss of intellectual language, both articulate and written. This paper is illustrated by eight plates, and gives more than ordinary interest to the number in which it appears. The other original papers by Drs. Veale, Heron Watson, and Matthews Duncan respectively, are also worth reading, those of Dr. Heron Watson and Dr. Matthews Duncan being illustrated by wood engravings.

THE JOURNAL OF ANATOMY AND PHYSIOLOGY.

Conducted by G. M. Humphry, M.D., F.R.S., of Cambridge ; Alfred Newton, M.A., F.L.S., of Cambridge ; Wm. Turner, M.B., F.R.S.E., of Edinburgh ; E. P. Wright, M.D., F.L.S., of Dublin ; and (as Editor) J. W. Clarke, M.A., Fellow of Trinity College, Cambridge, and Superintendent of the University Museums of Zoology and Comparative Anatomy. No. I. Macmillan and Co., London and Cambridge.

This journal, originating, we believe, in the University of Cambridge, is intended to supply the want which has long been felt of a medium of communication between scientific men on subjects connected with the progress of anatomy and physiology, the discussion of which subject occupies but a subordinate position in the medical journals, and is not generally admitted in the ordinary scientific periodicals. The present number, which is remarkable for the interest and variety, as well as the intrinsic value of its contents, contains a series of papers by some of the most distinguished anatomists and physiologists of the present day, together with reviews and reports on anatomy any physiology. The opening paper is the Address in Physiology, delivered by Dr. Humphry, at the meeting of the British Association at Nottingham last year, and this is followed by papers by Professor Huxley, Mr. Turner, of Edinburgh ; Mr. Wood's, of King's College, London ; Mr. Hulke, of the Middlesex Hospital, and others. Of the two reviews, one is a most learned and elaborate one on Owen's first and second volumes of the "Anatomy of Vertebrates," and the other, a short one of the first part of Dr. Beale's edition of Todd and Bowman's "Physiology." Dr. W. D. Moore, whose accomplishments as a physician and a linguist are well-known to the medical profession, figures largely in this number by his notices of some recent Dutch and Scandinavian contributions to anatomical and physiological science, and he also translates two papers by Dr. Donders, the well-known Professor of Physiology and Ophthalmology at Utrecht. The report on anatomy is by Mr. Turner, and that on physiology, by Dr. Rutherford, of Edinburgh, and they embrace the most recent researches on those subjects in this country and on the Continent.

THE NERVOUS SYSTEM. By Ludovic Hirschfeld, Professor of Anatomy to the Faculty of Medicine of Warsaw. Edited in English by Alexander Mason Macdougal, F.R.C.S., with Artistically Coloured Lithographic Illustrations, designed by J. B. Léveillé. London : Churchill and Sons. 1866.

This is the first instalment of a work which is to be completed in twelve parts, and is intended to illustrate the anatomy of the nervous system in man. It has already attained great celebrity on the Continent, and has been adopted by the Supreme Council of Public Instruction in France. The text is translated from the French edition of 1866, the anatomical nomenclature usual in Great Britain being adopted, and as far as the present part enables us to judge, the translator has performed his task with great clearness and accuracy. The illustrations which constitute the chief feature of the work, will embrace the anatomy of the entire cerebro-spinal and sympathetic nervous centres and distributions, with their relations, and they consist of coloured lithographic delineations copied from dissections made by the author after an eight years' service as demonstrator at the *Ecole Pratique* of Paris, and a further experience in neurology, obtained by him in preparing the specimens employed in producing the voluminous and expensive work of Bourgery. The present number contains five plates, three being single, and two double, and representing the vertebro-cranial dura mater and arachnoid membrane, and we have certainly never seen more beautiful or accurate representations of the structures they are designed to display, while the accompanying letterpress, placed opposite to the plates, gives a discription of every anatomical point deserving the attention of the student or practitioner.

THE INDIGESTIONS OR DISEASES OF THE DIGESTIVE ORGANS FUNCTIONALLY TREATED. By Thos. King Chambers, M.D. London : J. Churchill and Sons.

This elegant volume, by the author of "Lectures, chiefly Clinical," has been our Christmas book, for though dated 1867 an early copy came into our possession, and we found it as interesting as any of the popular annuals which deluge us at that festive season. Moreover, it is got up in a manner which, for a medical work, can scarcely be surpassed. We hope the author will accept as a well-deserved compliment the remark that after all that has been written upon the subject, we consider it a thorough triumph to have put forth so instructive a volume on indigestion. We have never, to our knowledge, seen Dr. Chambers, but we have often envied those who have had the privilege of his clinical teaching. This statement is our preface to the information we offer the reader—that the book to which we are drawing attention is eminently clinical. It is not, indeed, a series of lectures, but it contains no less than 227 cases briefly, but graphically, described, and these form the skeleton which, the author says, he has "articulated together by argument, and tried to make muscularly active by practical observations." He has succeeded in the trial ; nay, more, this "muscular activity," he has clothed with all the beauty of a clear and fascinating style. This being our opinion, we shall not be expected to mutilate his creation by quotations.

We cannot, however, persuade ourselves to lay down our pen without indicating some of the subjects included in this volume.

The Second Chapter is devoted to indigestion of the various foods—starch, albumen and fibrin, fat, water. The treatment of these is based on the pathological condition.

In the next Chapter we have an account of habits of social life leading to indigestion, the treatment being discontinuance. Many most valuable hints will be found in this division.

Abdominal pains, vomiting, flatulence, diarrhœa, constipation, and nervous diseases connected with indigestion, form the subjects of succeeding chapters.

We should have been glad to enter more fully into the work, and subject some of the propositions to more rigid scrutiny, but we are sure it will soon be widely known to the profession, and it treats of a subject on which every one of our brethren can compare notes with the author.

GOUT AND RHEUMATISM IN RELATION TO DISEASE OF THE HEART. By A. W. Barclay, M.D., Physician to St. George's Hospital, &c. Pp. 214. London : Churchill and Sons. 1866.

Although our medical literature abounds in books relating to the pathology, the diagnosis and the treatment of heart disease, as resulting from or associated with gout and rheumatism, yet Dr. Barclay from his extensive experience, especially in the practice of St. George's Hospital, is fully entitled to a hearing when he expresses his views on these very important topics. Indeed the very abundance of the treatises to which we have adverted renders the attainment of an accurate judgment as to pathology and treatment a matter of extreme difficulty to the conscientious reader, for unfortunately the views of different authors disagree so widely, and yet are all apparently founded on such strong arguments and such extensive experience, that the practitioner is puzzled which authority to choose as the most trusworthy guide. It is no disparagement to the merits of Dr. Barclay's present treatise to state that he has not satisfactorly cleared up many points of difficulty still existing as to the nature of the two diseases which it is intended to illustrate, nor has he struck out any remarkable novelties in reference to their treatment, or that of

the cardiac affections of which they are the forerunners or the complications, but he deserves the credit of having put together some ingenious hypothetical views as to pathology, some useful practical hints as to diagnosis, and some careful and well-considered directions as to treatment.

His hypothesis, for it cannot be called a theory, as to the nature of gout, is that the disease consists in some organic change in the constitution of the blood corpuscles, and to the objection that these corpuscles are perpetually destroyed and renewed, while the very essence of gout is to be found in its life-long continuance and its hereditary tendency, he answers by referring to the scars of wounds which retain their character although their material is always changing, and to the features of an individual human being, which, although liable to some alteration, maintain always a general resemblance, notwithstanding the periodical decay and renovation of the tissues. As to rheumatism, Dr. Barclay has little to remark as to its nature, except that it is somehow connected with an excess of acid in the system. That gout is not *caused* by the excess of lithic acid in the blood, but that the undue presence of this acid is an accompaniment only of the disease, is, he thinks, proved by the failure of the alkaline treatment to relieve a paroxysm of gout, while relief is at once afforded by specifics; but, on the other hand, whatever may be the essential nature of rheumatism, Dr. Barclay strongly approves of the alkaline treatment, which, as he believes, is proved by statistics to have very materially diminished the tendency to heart disease, and consequently to have lessened the mortality.

We regret that our limited space forbids us from entering more fully into the consideration of Dr. Barclay's book, which is well worthy of perusal as a thoughtful treatise on two very common and yet obscure complaints.

THE USE OF THE LARYNGOSCOPE IN DISEASES OF THE THROAT: with an Appendix on Rhinoscopy. By Morell Mackenzie, M.D., &c. Second Edition. Revised and Enlarged. London. 1866. Pp. 156.

When a work like the one before us, written for a limited class of readers, reaches a second edition in some twenty months, it requires little commendation from the reviewer, the verdict of the profession is its highest praise. We should not, however, be doing our duty either to the author or to our own readers if we did not refer to the additions and improvements made in this second edition of Dr. Mackenzie's book. In the first Chapter, which consists of an admirable and instructive history of the various attempts made to inspect the interior of the larynx before the time of Czermak, we find another name now added to the list of pioneers in laryngoscopy—that of M. Cagniard de Latour, who, "in the year 1825, made an unsuccessful endeavour to examine the larynx during life."—(Pp. 9-10.) This addition makes the history of the invention complete—we allude to it chiefly to show the care and industry with which our author has investigated the literature of his subject. The explanation of the principles of the formation of the laryngeal image (Sec. I., Chap. 3), has been much improved, not only by a clear exposition in the text, but also by some useful illustrations. This section will be much valued by all beginners in the art of laryngoscopy, and will enable them to readily understand a part of the subject, which is difficult, but on which it is essential to have clear ideas.

Several very ingenious inventions, which the experience of the author has led him to devise, are figured, in addition to those described in the first issue. Among others, we may especially refer to the rigid wire loops (page 120), which will be found invaluable in the treatment of many cases of laryngeal growths in which the forceps is inadmissible. Valuable directions are given for the preparation of solutions for local application, and of others for inhalation. This we consider an important addition, and it will, doubtless, add to the popularity of the book. Mayer's atomizer is recommended instead of Lewin's, mentioned in the first edition—a more extended experience has, doubtless, led to the preference expressed.

In the cases given by an author writing on such a subject as the use of the laryngoscope we have the best data for founding our opinions of the value of the instrument, and in the recorded experience of the writer we find the best materials for guiding us in the treatment of similar affections. Dr. Mackenzie gives us a number of fresh cases that will be acceptable to all who take an interest in the progress of medicine. Several of them illustrate the value of the laryngoscope in the removal of growths and foreign bodies from the interior of the larynx, others teach us the value of the direct application of galvanism to the vocal cords, while a third set illustrates the value of rhinoscopy. For applying galvanism to the larynx Dr. Mackenzie has invented a very ingenious little instrument, which we can say, from our own experience, is invaluable in treating many cases of functional aphonia.

The book possesses two more great merits: it is clearly and in places elegantly written, and it is brought out in a style which reflects great credit on the publisher. The type is good, and by a little closer printing than in the first edition has enabled the author to add a considerable amount of new matter without increasing the bulk of the volume. Marginal references are found on every page—an addition which we heartily wish other medical authors would adopt.

Medical and scientific works are too often printed in the smallest type on the worst paper, and bound in the saddest looking colours. A change promises to set in to replace this puritanism of the past, and we recommend the book we have just spoken of as a good example for authors to imitate.

TRAINING IN THEORY AND PRACTICE. By Archibald Maclaren. London: Macmillan and Co.

In the volume before us, the author has gone so thoroughly into the subject of exercise in its various forms for the development of the muscular system, that we cannot but pronounce it as one of the most concise and elaborately prepared works we have seen on this all-important matter.

Englishmen are, as a body, fond of exercise, and those manly sports, such as cricket, rowing, &c., are in no other country so popular or more resorted to in leisure hours. But, as Mr. Maclaren remarks, "the use often becomes abused," and in these pages the reader is shown to what extent he may go without injury to his constitution, and the bounds over which if he steps by an immoderate love of work, that constitution may be irreparably sacrificed.

In the opening chapter the author asks—"What does exercise do towards the life, health, and strength of the body? How do lifting and carrying, pushing and pulling, running and jumping, do us good? In fine, what is exercise?" He then endeavours, in a lucid and common sense manner, to solve the problems which have so often been mooted on the training of youth, and concludes his ably written treatise with an appendix of some forty pages, with tabular forms on diet, weight, duration, &c., which to the younger portion of our readers especially, will be found an invaluable guide.

ACHOLIC DISEASES; comprising Jaundice, Diarrhœa, Dysentery, and Cholera, with a preliminary Dissertation on Bile, the Bilious Function, and the Action of Cholagogues. By Alexander Chas. Macleod, L.K.Q.C.P.I., M.R.C.P.L., &c. Pp. 230. London: Churchill and Sons. 1866.

This book exhibits a considerable amount of practical experience and much power of reflection and observation, but we do not think it will do much to extend the domain of scientific medicine. The author labours somewhat unncessarily to prove the importance of the part played by the bile in the animal economy, and he therefore argues that the cure of many affections is to be obtained by restoring or increasing the biliary secretion. He also takes care to point out the essential differences existing between the hepatic secretion and that of the kidney, although it is scarcely requisite to insist upon this point when writing to medical men who are fully aware of the distinction. In some respects we cannot help thinking that Mr. Macleod is incorrect in his conclusions, as where he assumes that of the bile secreted daily *twenty-nine parts are absorbed*, and one only evacuated. He founds this view on the fact that the quantity of bile voided with the fæces in a condition of health does not exceed one scruple, or about the three-hundredth part of the daily secretion; but he apparently forgets that, although bile does not appear *as bile* in the intestinal evacuations, its constituents pass away in the form of resins or some other hydrocarbonaceous form. As a corollary from his fundamental propositions, Mr. Macleod argues that the best remedies for the diseases he includes in his title-page are to be found in cholagogues, and especially mercury.

CURRENT LITERATURE.

Pavilion Asylums, by C. Lockhart Robertson, M.D., is a pamphlet on the application of the pavilion system of hospital construction in the building of lunatic asylums. This system may be said to be now firmly established. The magnificent

military hospital at Woolwich is built in this manner, and we believe the new St. Thomas's Hospital is to be constructed on the same principle. Dr. Robertson has drawn a plan for a pavilion asylum to accommodate 250 inmates, with capacity for extension to 550, which appears to us complete and commodious.

We have also received Dr. Nelson's excellent Introductory Lecture at Queen's College, Birmingham, entitled, *Collegiate Education in Relation to the Inter-Community of the Sciences.*

NEW EDITIONS.

On Malformations of the Human Heart. By Thos. B. Peacock, M.D. Second Edition, with Plates. We are glad to announce the new edition of this standard work on its subject, which has been carefully revised and brought down to the present date by the author. The plates are very valuable.

The Surgical Diseases of Women. By Baker Brown, F.R.C.S. Third Edition, with Illustrations, by I. Baker Brown, jun. The chief addition to this edition consists in the plates, drawn with a degree of fidelity seldom witnessed, by the son of the author. These are alone worth the price of the volume, the value of which is well-known to the profession. This edition contains the author's latest experience on those plastic operations for vesico and recto-vaginal fistulæ, for which he has so long been distinguished.

The Medical Press and Circular.

"SALUS POPULI SUPREMA LEX."

WEDNESDAY, JANUARY 23, 1867.

THE BETHNAL-GREEN GUARDIANS AND THEIR MEDICAL OFFICERS.

IN the year 1864 the Poor-law Board at Whitehall sanctioned and encouraged the Bethnal-green Guardians in dismissing one of their Medical Officers upon charges which were perfectly frivolous and untenable. The farce of an inquiry was indeed gone through on the part of the Government, and the result was, that the Medical Officer in question completely disproved all the accusations made against him by the Guardians, except, we believe, that he had occasionally used in his entries black ink instead of red, or red instead of black, or had committed some such trifling delinquency. The real fact was that the Medical Officer had done his duty too faithfully to the sick poor, and had thereby incurred the hostility of the Guardians, for he had, unfortunately for himself, exposed a great number of instances wherein the death of patients had been caused by culpable negligence on the part of the authorities, or by the omission of due sanitary precautions. This conduct on his part was, of course, unpardonable by the Bumbles of Bethnal-green, and the Poor-law Board, although they did not pretend that any serious charges had been established against him, called upon him to resign on grounds of expediency, as they did not think that he and the Guardians *could act together in harmony!* The period to which we refer was one in which the movement for Poor-law Medical Reform had not yet made much impression upon the public mind, and any Poor-law Medical Officer who urged a more humane treatment of the poor than was practised by his superiors rendered himself liable to dismissal. Even our medical contemporaries gave a very feeble support to any Medical Officer placed in such a dilemma, however honourable or blameless his conduct might have been, while the general press ignored the matter altogether. It was only at a subsequent time that the chief organs of public opinion appeared to awake from their indifference, and to discover that sick paupers were, after all, human beings, and that those who advocated their kind treatment were worthy of praise and reward rather than of censure and dismissal.

These same Guardians and one of their present Medical Officers are now involved in a very unpleasant inquiry in reference to the death of a patient under circumstances of a very painful nature, and in which the Medical Officer, Mr. MASSINGHAM, is inculpated. A Coroner's Inquest has been held, and a verdict has been returned reflecting strongly upon the negligence said to have been displayed, and the consequences have been that Mr. MASSINGHAM has been suspended from his situation, and a Poor-law inquiry has been instituted by one of the Poor-law Inspectors. As matters stand at present in reference to Poor-law Guardians and their Medical Officers, the latter may regard his dismissal with indifference; but as in the present instance very serious accusations have been made upon Mr. MASSINGHAM'S conduct, and as these accusations have been repeated, with the usual exaggerations, by some of the cheap papers, it is not an inappropriate time to point out some of the leading features of the case. If Mr. MASSINGHAM should be dismissed on the report of the Poor-law Inspector, the fact will be no disgrace to him, inasmuch as the Poor-law Board sanctioned the dismissal of one of his former colleagues for showing too great zeal in behalf of the sick poor. But there is a sentiment of justice and humanity in the public mind independent of the shortcomings of Poor-law Guardians or the redtapeism of the Poor-law Board, and the case of Mr. MASSINGHAM must be dealt with according to its own merits.

It appears that a poor woman was taken in labour in Mr. MASSINGHAM'S district on the 2nd inst., but she was not his patient, nor was he in any way bound to attend her during her confinement. She was in fact on the point of being conveyed to the Lying-in Hospital of the City of London, for which institution she had a letter, but in consequence of the state of the streets from the heavy fall of snow, the cabman who was called refused to take the poor woman, except at an advance of his fare, and the money not being forthcoming, she was confined on the floor of the room where she was waiting

until the question of the fare could be adjusted. Now, here in the first instance, the circumstances leading to the abnormal delivery were the inclemency of the weather, the state of the streets, and the refusal of the cabman to take the fare at the usual rate. Subsequently, however, in the evening an order was procured from the overseer for the attendance of the district surgeon, but as it was not marked as a midwifery order, and was not accompanied by any special directions, nor presented by the bearer as a document requiring immediate attention, its consideration was postponed in the usual course till the next morning. But before his ordinary hour for going to see the out-door patients, and while his surgery was full of applicants for medical relief, Mr. MASSINGHAM was again requested to see the woman. That he did not immediately respond to this summons, is a circumstance to be regretted, and the only excuse that can be offered is, that among the lower classes of patients it is so common to demand the attendance of parish surgeons in terms of exaggerated urgency, that frequently the application fails to receive immediate attention. But be this as it may, Mr. MASSINGHAM was on his way to see the woman in about an hour, when he was himself taken ill and obliged to return home, and he sent his son (a gentleman, we understand, in his twenty-first year) in his place. The poor patient, however, died soon after this visit, and before Mr. MASSINGNAM'S arrival, which took place an hour afterwards. The cause of death seems to have been effusion into the pericardium, and the case altogether was an exceptional one, but we confess that it does not appear that Mr. MASSINGHAM'S conduct was so culpable as has been represented, although the result was unfortunate; and it was also unfortunate that he should himself have been labouring under illness when he went to attend the patient. The fact of sending his son, who was unqualified, and therefore technically incapacitated from acting as his substitute, was, perhaps, the best course he could take under the circumstances. If the patient's death was in any way connected with her confinement, it is certainly more charitable to believe that the fatal pericarditis was due to the delay in her removal to the lying-in hospital, rather than to any fault on the part of Mr. MASSINGHAM.

Notes on Current Topics.

THE CATASTROPHE IN REGENT'S PARK.—Seldom has such a thrill of horror passed through London society as on the occasion of the break up of the ice which precipitated nearly 200 people into the water in the midst of their pleasure. Nevertheless, it ought not to be forgotten that ordinary prudence would have averted this tragedy. The sufferers have immolated themselves for the sake of a few last minutes of their pastime. Among the victims were two medical students, one a third years' man at University College, the other a pupil of Dr. Hardwicke's. As in every sad occurrence of life our profession was to the front with its assistance. Dr. Randall and Mr. Fuller, at the Marylebone Workhouse, have already received the public approbation which was their due for the exertions they put forth, and the same may be said of the other workhouse officials. We wish to draw attention to the invaluable services of Mr. Obre at the scene of the accident. This gentleman ably fulfills the duties of surgeon to the Humane Society for this district, and his arrangements were unexceptionable. We may also take the opportunity of thanking Mr. Copland, a student at the London Hospital, for the courage with which he rescued three little girls from drowning, although greatly encumbered by his over-coat and skates. Altogether the profession has been found as ready as ever, when called upon by the voice of humanity.

YELLOW FEVER IN JAMAICA.—We regret to announce an outbreak of this disease in the war vessels at Port Royal. Commander Jenkins, of H. M. gunboat *Nettle*, as well as Dr. D'Arcy the surgeon to the troops at Morant Bay, are amongst the early victims. Steps have been taken to isolate the cases in the hope of preventing the spread of the disease. We are glad to report that circulars have been issued by government authority in all the parishes of Jamaica, in reference to sanitary matters, and a special handbill drawn up by Dr. Steventon of the Public Hospital, and containing precautions against the spread of cholera, has been posted in conspicuous places throughout the island. This is well. To be beforehand is the only chance with such an enemy.

THE ARMY MEDICAL WARRANT.—It appears the Army Medical Warrant, of which so much has been said, is ready and in type. It will not be published separately, but will be included in the second volume of the "Amended Army Regulations," which will shortly be published. In some respects the new warrant will grant higher rates of pay than those suggested by the committee on whose recommendation it is founded. The protest on behalf of the officers of higher rank has also been attended to. They will receive an increase (of no considerable amount, however) beyond the scale published in a former blue-book.

INFANTICIDE.—The subject of child murder is again being mooted in both the London and provincial press, and we sincerely hope Parliament will not have passed its next session without the introduction of and the becoming law of some stringent measures, which shall punish more severely those who commit these diabolical crimes, not passing over those who are primarily the cause, and often the prompters of these last acts to destroy the traces of their shame, and the disposal of the bodies in the hopes of escaping the meshes of the law. A correspondent remarks:—

"There have been some surprising instances of acquittal in cases of infanticide of late, where no apparent grounds have existed for a recommendation to mercy. If the law were allowed to take its course whenever a verdict of wilful murder has been justly arrived at in these cases, we should not be so often shocked by their occurrence, and a more healthy moral tone on this subject would prevail.

"Medical witnesses and juries must do their duty, and not allow any false maudlin views to stand between them and the administration of justice."

Value of Dublin Medical Degrees.—It is a curious fact that coincidently with the steady decline in numbers of the Oxford and Cambridge Medical Graduates, several of the Graduates in Arts of these two ancient Universities come over to Dublin and take their medical degrees there. This was specially noticed in 1866 ; when among the Oxford men who graduated in medicine in Dublin was a distinguished Fellow of New College.

Students for the Navy.—Our readers are aware of the last scheme of the Admiralty to obtain Surgeons for the Navy. The department is at its wit's end, and rather than do justice to its medical men, proposes to enlist students for ten years service, before they have obtained their diplomas. The *dodge* has been repudiated by the students themselves in terms which do them great credit. At a meeting of the Junior Medical Society of London, held at University College, the following resolution has been carried with acclamation :—

"That this meeting views with dissatisfaction the proposal of the Admiralty to 'subsidize medical students of three years' standing, until they have become qualified medical practitioners on entering into a bond to serve in the navy for ten years,' as likely to bring discredit on the whole medical profession, inasmuch as the standard of the naval branch of the service would, so far from becoming raised, be considerably lowered by the class of men such an inducement would be likely to bring into it."

Dissecting Alive.—We last week inserted a quotation from the *Veterinarian*, in which the horrors inflicted on horses under the name of science were described. Seldom have the revelations of vivisection been so heartrending. Sixty-four operations, we are now told on trustworthy authority, are performed by French pupils on one living victim. The leading journals have denounced such practices in indignant terms. Whatever may have been urged at times in palliation of certain experiments on living animals by physiologists, who, by-the-bye, almost invariably administer chloroform to their victims. There can be no possible excuse for students dissecting animals alive, which is, in point of fact, what the practices revealed amount to. To invoke the name of science on behalf of these cruelties is a profanation which all truly scientific men will condemn. We have heard enough of the use of despotisms. If the most enlightened of all can permit such things in the nineteenth century, surely the indignant people will insist on the cessation of practices revolting to humanity.

The Strand Guardians again.—The game between the local and central authorities for administering our Poor-law has been advanced another move during the past week by the Strand Guardians, who have negatived the proposal to appoint a resident officer to the workhouse. The motion for offering the post to Dr. Rogers, which, as we have already shown, was only an attempt to get rid of that *too* able surgeon, was previously defeated. It is now the turn of the central authority. It has long been declared that the Poor-law Board possesses the power to enforce its proposal, and we sincerely hope such may prove to be the fact. But if so, why so long delay decisive action? Local magnates are not likely to be convinced. They must be compelled.

The Case of the "La Plata."—This steamer, belonging to the Royal Mail Company, arrived at Southampton on Thursday morning, having left St. Thomas on the 31st ult. Dr. Wiblin, as Superintendent of Quarantine, at once visited her, and found there had been sixty-one cases of yellow fever on board, of which twenty-three had been fatal, and four remained ill. Among the victims was the surgeon of the ship, Mr. Young, who died on the 9th inst., and in reference to whose case it has been asserted that he was already in bad health when sent to take charge of the *La Plata* at St. Thomas. If so, we must deem it very wrong to have placed one already breaking down in a position in which he would be almost certain to succumb. But surely it is time to press the inquiry why these passenger-ships should put into St. Thomas at all? Have not the authorities read in the newspapers how the French mail-boats were recently ordered to avoid an infected port? Who is responsible for the needless sacrifice of these sixty-one lives in a voyage between the 31st of December and the 17th of January? Putting the survivors in quarantine at Southampton—whatever magic effects it may have—will certainly not call these sixty-one passengers from the depths of the Atlantic. Until something is done to prevent the repetition of such occurrences we should strongly advise all would-be passengers to avoid the mail steamers. A longer voyage in a sailing-vessel would at least be preferable to a fortnight's sojourn in a plague-stricken steamer.

Health Committees for the Poplar District.—We have before us the reports of the committees appointed by the Privy Council during the last cholera epidemic to the Board of Works for the Poplar District. There is little doubt that but for the regulations made by the committees for medical superintendence the disease would have been much more extended and fatal. It appears from two very clear and succinct tables by Drs. Woodforde and Ellison, the Medical Officers of Health for the North and South Districts, that the number of deaths from cholera was greatest on the 25th of July, but that the maximum number from diarrhœa occurred about the 5th of August. The number of cases of cholera and diarrhœa attended by the Medical Visitors, with the number of deaths, is well shown in the following table, which we take from the Report :—

Sub-District.	Cholera.	Diarrhœa.	Deaths.
No. 1.	34	1364	29
No. 2.	65	1433	44
No. 3.	50	1962	21
No. 4.	74	222	7
No. 6.	109	1493	36
No. 5.	22	1026	22

It appears in the accounts that the sum of £195, 7s. 4d. had been employed in flushing, deodorising, and disinfecting, and there is little doubt that this amount has been advantageously expended; but we feel bound to remark that the sum of 60 guineas, suggested by the Committee to be given to the Medical Officer (Mr. Ellison), seems small, and the same observation will apply to the sum proposed to be given to Mr. Shadrake, the Inspector of Nuisances. There are, however, two suggestions of the Committees which we should wish to see completely carried out:—1st. "That a Sanitary Committee be appointed." 2nd. "That it would be a satisfactory alteration of the law if no house were allowed to be tenanted unless a certificate that the premises were fit for habitation were first obtained from the District Board of Works." On retiring, the Committees especially notice the indefatigable attention, anxiety, and care evinced throughout by the Medical Officers, whose untiring attention most materially contributed to the efficient arrange-

ments so speedily organized. The deepest regret is also expressed by the Committees that they, in common with the Board, have to lament the loss of two such valuable officers as Mr. C. C. Ceely, late clerk, and Dr. Ansell, late Medical Officer for the North District. It will be remembered by our readers that Dr. Ansell was one of the oldest and most esteemed members of the Examining Board at the Apothecaries' Hall. He fell a victim to the disease which he was striving to prevent and cure in others.* The reports are very clear on some points of importance, with regard to drainage and water supply, and many of the observations would be of great use in making regulations during another epidemic.

OUR MERCANTILE NAVY.

On Wednesday Captain Henry Toynbee read before the members of the Society of Arts a paper on "Mercantile Marine Legislation, as Affecting the Number and Efficiency of British Seamen." He said—"Having spent the last thirty-three years of my life among seamen, I have been struck with the importance of some of their wants, and have been trying for some years to get those interested in their welfare to take up the question of their social position, and deal with it in a broad and comprehensive manner. The scarcity of British seamen, and the tendency to discontent which is showing itself in the east end of London, and in several of our seaports, make it more important that those who understand them thoroughly should come forward and explain what really is wanted."

The following is a summary of the changes proposed by Captain Toynbee:—

1. That Government shall establish a pension fund and life insurance adapted to the circumstances of seamen and their families in connection with shipping offices, and join on to them a benefit fund, the principle of which shall be the sums which Government has received and is still receiving as unclaimed effects of deceased seamen; also that the Act be so modified that the wages and effects of deserters shall go to this fund, and that they will consider in what way they can discourage giving a month's advance before starting, except as a payment into the pension fund or life insurance.

2. That Government shall put a stop to scurvy in the mercantile marine by calling for and entering in the heading of the "articles" a new scale of provisions.

3. That they shall increase the space given to seamen to 15 superficial feet of deck, and not less than 90 cubic feet of air; also that they shall require it to be properly lighted, drained, ventilated, and protected from the sea as well as from the gas which rises from cargo. Safe glazed lamps and oil to be provided for their use; and these rights of seamen to be entered in the heading of the "articles of agreement," and a copy hung in the forecastle.

4. That dock clerks be attached to shipping offices, whose duty it shall be to visit ships on their arrival, see that the crews get part of their pay, and, if they wish, send them to their homes, promising to send the rest of their pay and papers after them.

5. That shipping-masters shall be empowered to order the inspection of all ships' forecastles and provisions, or at least those of any against which there is a reasonable complaint. Again, that shipping-masters abroad be empowered to make a commander ship another man immediately in the place of one discharged; also that vessels engaging crews to be discharged abroad shall be bound to provide them with another ship or pay their passage home.

6. That Government be moved to provide for the admission of English boys into the mercantile marine, as a means of national defence in case of war, as well as an honest employment of subjects, instead of allowing them to be supplanted by foreigners.

Lastly. That Government be asked to grant public lands in our seaports for married sailors' homes, sailors clubs and institutes, and to encourage in every way the social improvement of seamen, who suffer great temptations from the peculiar circumstances of their profession.

CHARGE AGAINST A MEDICAL MAN.

On Friday, at a meeting of the Board of Guardians of Bethnal-green, Mr. Collins in the chair, the conduct of Dr. J. Massingham, the parish surgeon, who was alleged to have neglected a patient named Anne Ferry, under circumstances which a coroner's jury pronounced to be "inhuman, and such as disqualified him from continuing to hold his appointment," came under discussion.

The sister of the deceased and the other witnesses examined at the inquest were called, and repeated their evidence.

Dr. Massingham handed in the following statement:—"On Wednesday, Jan. 2, about seven P.M., a woman brought me an order. I asked what was the matter. She said 'confinement.' I inquired how long the person had been ill, and if she wanted me directly. She replied, 'No, she was confined about eleven o'clock this morning,' and that a neighbour had attended her. I said, 'What did you get an order for;' and she said, 'Because I want some medicine for the after pains,' at the same time giving me a bottle which she had brought for it. I gave her some medicine, and as she was going out she asked me to give her a call on my round next morning. At about half-past ten next morning a girl came to my shop and said her mother was very bad, and she thought dying. I thought the girl came from another patient, who had several times sent to me that she was dying, and I said, 'Nonsense; your mother will not die yet, and I am coming out, and will call and see her.' Directly after, another came, and asked me to go and see Mrs. Ferry, as they thought she was dying. I said she could not be from her labour, but that there must be something else the matter with her. She then told me she was turning blue. I then said, 'She must have some disease of the lungs, and I am coming out directly, and will call on her first.' I went out in about ten minutes afterwards, and had to see a patient on my way to Ferry's house, and while there I had a return of dysentery, which I had been suffering from for three or four days, and was obliged to return home. I immediately sent my son to see her, and he returned and told me she was suffering from congestion of the lungs, and would survive about an hour or so. He prescribed remedies for her. As soon as I was able to get out again I went to see her, and found her dead."

The Rev. Mr. Hansard said that the statement of Dr. Massingham did not contradict the evidence before the board; but simply alleged that a totally different colour was given to the messages by the way they were delivered to him—that, in fact, he had no reason to believe that the case was so serious as it really was.

After a long discussion generally condemnatory of Dr. Massingham's views relative to the time he considered a patient might be left unattended, and of his conduct in this especial case, a member of the board said that the course taken by the board should be such as would distinctly mark their disapproval of Dr. Massingham's conduct. He therefore moved that Dr. Massingham be suspended, and that the evidence and Dr. Massingham's statement be forwarded to the Poor-law Board.

This motion was carried unanimously.

Correspondence.

CLITORIDECTOMY.

TO THE EDITOR OF THE MEDICAL PRESS AND CIRCULAR.

Sir,—Although a dissentient from the views entertained and expressed on the above subject by Mr. Baker Brown, I cannot but acknowledge my admiration of the "pluck" displayed by that gentleman in battling against the opinions of the major portions of the profession, perhaps in many cases prejudiced; for no sane man can deny that we are, as a body, too conservative in our ideas of anything new, and are apt to regard them as innovations to be stamped out as a disease, and the luckless introducers of them denounced as quacks.

* On the 24th of last July, as related in the obituary of him published he following week.

In the present case, however, Mr. Baker Brown has come forward boldly, and as a man he offers "to place every facility" in the hands of a committee to be appointed by the Obstetrical Society, for "investigating his cases most rigidly."

Nothing can be more straightforward than the letter in your journal of the 16th; and I sincerely hope the Obstetrical Society, in whose province the matter is, will accept the challenge, and impartially sift both theory and practice.

If such operations are necessary, and the results lead generally to a satisfactory issue, then let it go forth to the profession for their benefit and that of their patients, that Mr. Baker Brown is THE man; but if it is proved to be trash and worse than useless, as many imagine, then the strongest language will be inadequate for the denunciation of a theory, which, it must be confessed, is fraught with dangers both socially and morally.—I am, sir, yours, &c.,

A SUBSCRIBER.

PALL MALL GAZETTE TESTIMONIAL.

TO THE EDITOR OF THE MEDICAL PRESS AND CIRCULAR.

SIR—The spirited conduct of the Proprietors of the *Pall Mall Gazette* in protecting the interests of the public and the honour of the profession, in the article upon Dr. Hunter, and in the defence of the case of Hunter *v.* Sharpe, has already been the subject of favourable comment in your pages.

Several members of the Profession and a few other gentlemen think it desirable to show some mark of their appreciation of this conduct, and propose to join in a limited subscription, the disposal of which shall be hereafter determined.

We beg to request your assistance in making known their intentions, and in furthering the object they have in view.

G. D. Pollock, Esq., 27, Grosvenor-street; and T. H. Hills, Esq., 45, Queen Anne-street, have consented to act as treasurers and subscriptions may also be paid to the Argyll-street branch of the Union Bank.—We are, sir, your obedient servants,

G. W. CALLENDER, 47, Queen Anne-street.

J. W. PARKINSON, Arts' Club, Hanover-square, W.

MR. RICHARDSON'S REPLY TO MESSRS. SMYLY AND HOLT.

PERREVE'S STRICTURE DILATOR.

TO THE EDITOR OF THE MEDICAL PRESS AND CIRCULAR.

SIR,—I confess to some disappointment on finding that Mr. Philip Smyly, in his letter in your number of the 9th instant, so "dexterously" evaded answering the question I put to him in my communication of the 12th of December—namely, "In what portion of Mr. Holt's memoir, which has now run through two editions (1861 and 1863), such an acknowledegment or mention of Perrève's name is to be found," as stated by Mr. Smyly in his letter of the 21st of November. Mr. Smyly there having asserted, that the idea of his (Mr. Holt's) instrument, "Mr. Holt himself acknowledges he derived from Perréve's."

It appears to me, that in a matter in which honour is implicated and a question of truth is involved, Mr. Smyly should not have lost a moment in pointing out, if possible, where such an acknowledgement is recorded by Mr. Holt.

I am not aware of any such admission. There is no mention whatever, of Perrève's instruments or mode of treatment in Mr. Holt's lectures on the "Immediate Treatment of Stricture of the Urethra," in the *Medical Times and Gazette* for 1861; and I am equally positive, that there is likewise no allusion to Perrève in either of the two, and only editions, of Mr. Holt's memoir, subsequently published.

Instead of Mr. Smyly explaining *that* matter and keeping to the point in dispute—viz., the differences between M. Perrève's and the so-called "Holt's" dilators, he leaves the latter duty entirely to Mr. Holt, most ingeniously substituting a totally distinct question. For, he asks: "Can an instrument brought before the professsion in 1847, and rejected as dangerous, be the same as that introduced many years later by Mr. Holt, and received as valuable and safe?"

What the candid reader and Mr. Smyly will have to say is not whether the instruments "can" be identical, because the results are different, but whether they are so or not?

I have never denied that Mr. Holt *uses* the instrument differently, as *he* is at some pains to show, and *if* there is *in reality* any difference in result, it is due to *that*, and not because the instruments are different. For they, I again repeat, with the exception of the conducting-rod being hollow, in the so-called Holt's dilator, instead of solid, are identical; Perrève's, which I have now before me, having all the essentials for safety, which Mr. Smyly is here again called upon to prove not to be the case. And, at the same time, would he be good enough to show where the records are to be found of the injuries inflicted by an *undoubted* Perrève's instrument, that, as he asserts, led to its rejection as "dangerous?" If I do not mistake, he will be unable to adduce any cases of the kind from the records of either British or Irish surgery.

I apprehend that the reason Perrève's system lapsed, as many others have done, was, from its inventor not having kept it constantly before the public—an advantage which certainly has not been lost sight of by Mr. Holt!

Whether Perrève died or not soon after 1847 I cannot say; but, had he taken a hint from the modern and worldly-wise system of writing cheap, popular little books or pamphlets, with taking titles addressed to the public; and not contented himself, as he did, with a scientific octavo, which was never thrust before any public, professional or otherwise, I make no kind of doubt that Mr. Smyly's taunt would not have been applicable.

That the profession ever "rejected" Perrève's instrument is a mere assertion. He did not succeed in establishing it, which is quite another thing, and perhaps for the reason I have given. Hence, neither his system nor his instrument was known here, and therefore I shall feel surprised if Mr. Smyly can find any cases of its ill-success from our practice.

The matter at issue between us being—whether the instrument called "Holt's dilator" is the invention of M. Perrève or of Mr. Holt, I am really at a loss as to Mr. Smyly's meaning when he says that he used the term "mis-statement" in his letter alluded to, knowing that I "was well acquainted with the facts of the case, not only from the very able paper of" his "colleague, Professor Macnamara," but also from the discussion at the Surgical Society of Ireland on a paper read by" himself "on the immediate plan" before that Society, "when the differences between Perréve and Holt were discussed."

In consequence of the above observations of Mr. Smyly, I am here compelled to state that, instead of being well "acquainted with the facts of the case," (the structure of Perrève's instruments), from Professor Macnamara's paper, the Professor's description of dilators is not a description of Perrève's instruments at all; for neither of the dilators he attributes to Perrève, are described in any writing of his that I can discover.

It is to be regretted, therefore, that Mr. Smyly did not more closely study his colleague's account of the dilators before he published his letter. If he had done so, I would not now, most probably, be under the necessity of showing, that Professor Macnamara, when he published his paper, had so slight an acquaintance with the structure and arrangement of Perrève's instruments, that his account of them, instead of teaching me "the facts of the case," were on the contrary calculated to lead one completely astray, which I shall now clearly prove.

Professor Macnamara's paper is to be found in the *Dublin Quarterly Journal of Medical Science* for November, 1862. In speaking of the so-called "Holt's dilator," at p. 299, he writes thus:—

"This instrument, the idea of which Mr. Holt acknowleges himself to have derived from M. Perréve" (where?) "resembles one of the two instruments first suggested by this latter gentleman for forcible dilation of stricture of the urethra."

With regard to this observation of the Professor, I shall here mention that in Perrève's work there are not only two, but eight, dilators illustrated, so that on this point the Professor has been mistaken.

Professor Macnamara next observes that "one of his" (Perréve's) "instruments was that which he termed the straight dilator, an instrument composed of two semi-cylindrical tubes united at the vesical extremity by a joint, and terminating at the other extremity, each in a short plate at right angles to the two blades, and traversed by a screw capable of approximating those two handles, as we may term them, to each other."

No such constructed instrument is alluded to by Perrève in his work. The only straight dilator described and illustrated by him being the one here represented (Fig. 1), and which was traced from his original plate and engraved by Mr. Wm. Oldham.

Fig. 1.*

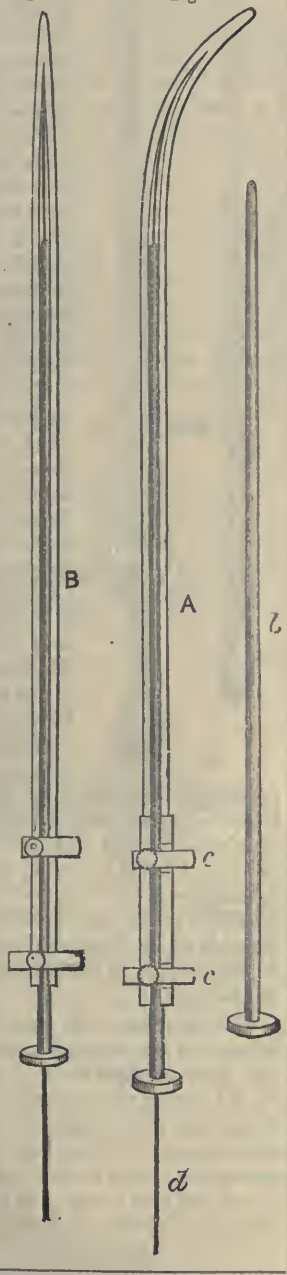


Fig. 2.†

In this instrument the vesical extremities of the blades and conducting rod are represented by Perrève as welded together, and the blades, instead of being divaricated by means of the screw and knee-lever, are separated by the ordinary conical forcer.

I may be wrong in my supposition, but it strikes me, that the Professsor's description of the straight dilator applies either to one of the forms of Lyons' dilators, or possibly to a modification of M. Civiale's dilator, illustrated in his "Maladies des Organes Génito-Urinaires." At all events, it is not applicable to Perrève's straight dilator illustrated in fig. 1.

Professor Macnamara further writes: —"His" (Perrève's) "other instrument closely resembled Mr. Holt's present one, with, however, this most important difference, that it contained no central stilette" (conductor), "the safe conduct of the dilators being entrusted to grooves, with which the two blades are channelled throughout their entire extent; the obvious disadvantage of such an arrangement being, that at any moment the dilator might get out of the grooves, and inflict serious injury on the walls of the urethra—a source of danger from which Mr. Holt's modification effectually guards us."

Fig. 2, which is an exact representation of the instrument in my possession, shows that on this point, likewise, the Professor had fallen into error. Indeed, not one of Perrève's eight dilators is delineated by him as without a conductor!

Such are "the facts of the case" in Professor Macnamara's paper, and from which, according to Mr. Smyly, I must have derived an accurate knowledge of the "differences between Perréve's and Holt's dilators." The real fact, however, being, as just shown, that if I depended on the Professor's description of Perrève's instruments, I could not possibly have had a correct idea of their structure.

Let us now speak of Mr. Smyly's reference to his own communication on the "immediate plan," which was made at the meeting of the Surgical Society of Ireland, on the evening of the 20th February, 1863, and reported in the number of this journal for the 11th March following.

Mr. Smyly in his letter affirms that, "the differences between Perréve and Holt were discussed" on that occasion. It so happens that this is the very reverse of having been the case, as not one of the gentlemen who spoke on the "immediate method" that evening, pointed out the differences between the two instruments. Certainly, neither Mr. Smyly nor Professor Macnamara could have done so correctly, as they were not at the time aware of the actual structure of Perrève's dilators. Professor Macnamara, indeed, named as Perrève's, an old instrument of Mr. Colles', which was produced at the meeting by my late talented friend, Dr. Glascott Symes. But, as Professor Macnamara in the number of the *Dublin Journal*, above alluded to, describes as Perrève's, dilators quite different from any of the instruments illustrated by the latter gentleman, it may safely be assumed, that his having identified Perrève's name with Mr. Colles' instrument, was a misconception on his part.

It is evident, then, that I could not have learned "the facts of the case" from Professor Macnamara's paper, from Mr. Smyly's communication, nor from the discussion thereon; consequently it follows, as a necessary sequence, that even from his own, and only references on the matter, he had no justification, whatever, for applying the offensive term "mis-statement" to my original observation.

Mr. Smyly's reference to his paper has, however, enabled me to refresh my memory, and thereby, possibly, to have justice done in another matter in connection with the so-called "Holt's dilator." For, in that same paper Mr. Smyly appropriates and illustrates as his own, Desault's button-ended metallic (iron) guide, which he (Mr. S.) has added to the "Holt's" dilator, and which he could not have done, but for the conducting rod of Perrève, whose name he now endeavours *almost* to ignore.

The following quotations from Mr. Smyly's paper, and from Desault's work, placed side by side, will show, that Mr. Holt is not the only surgeon who, without acknowledgement, has been indebted to French ingenuity:—

Mr. Philip Smyly in 1863.

"The *guide*" ("silver or steel wire") "is about *twice the length of the catheter*, and is terminated by a small *button*, which exactly fits *the orifice*" *(at the point)* "of the catheter. There is no ring at the opposite end of the guide, so that the catheter may be withdrawn from the bladder without removing the guide."

Desault in 1813.

"Besides, if we fear finding some difficulty in passing the second catheter, it would be easy to obviate this inconvenience by making use of catheters *open at both ends;* we should introduce the first by means of a *stylet with a button*, and before changing it we should furnish it with a *stylet* (guide) about *two feet long*, which should be pushed some lines into the bladder; then we should withdraw the catheter upon the guide, which must be left in its place, and upon which we may thus conduct a new catheter without trouble, and with safety."—*Œuvres Chirurgicales de Desault.* 1813.

* Perrève's straight dilator with forcer between the blades.

† A. Perrève's curved dilator, with forcer on conducting rod; a little under half real length; *cc* clamps; *d* conductor; *b* separate forcer.—Wm. Oldham, scp.

Although the principle is the same, I need hardly observe, that this is quite a different kind of guide from the cat-gut one Dr. Hutton was in the habit of using, and which is the guide alluded to with such apparent *naivete* by Mr. Smyly.

Astonished as I am with Mr. Smyly's letter, I am still more so with Mr. Holt's, for the manner in which he has acted towards Perrève, to whom he is under such deep obligation, as I shall show a little further on. But first as to the letter itself :—

Mr. Holt writes that I am "in error. The instrument that I use," says he, "is so different in detail that I am surprised it has escaped Mr. Richardson's observation." "To my mind," he further writes, "it is the difference between failure and success. In Perréve's dilator there are three errors : first, you have no positive means of knowing when the instrument is in the bladder ; second, there is nothing to prevent the tube slipping from between the blades ; and third, the directing-rod projects so far beyond the handle of the instrument, as to prevent the tube being quickly thrust between the blades, so that the stricture or strictures may be fairly split."

As to Mr. Holt's statement, that in Perrève's instrument "you have no positive means of knowing when the instrument is in the bladder," it should be recollected, that when he (Mr. Holt) first employed his "new" dilator, the two instruments *were actually identical.* It is only of comparatively recent date, that Mr. Holt has made Perrève's directing-rod hollow to attain this object.

In his next statement, "that there is nothing in Perréve's instrument to prevent the tube from slipping between the blades," he is greatly mistaken, as there is the conducting-rod. (*Vide* fig. 2.)

Again, he says, "Perréve's directing-rod projects so far beyond the handle of the instrument as to prevent the tube being quickly thrust between the blades." Why, this is the very directing-rod which he denies the existence of in his second objection, and which *did* prevent the slipping of the tube ! Mr. Holt cuts off a few inches of the conductor, so that he may "quickly thrust" the forcer, which Perrève did not do, and which is the real total of the difference between Perrève's and Mr. Holt's mode of using the instruments, which, with the exception of the *hollow* conductor, I reassert, are identical in form and action.

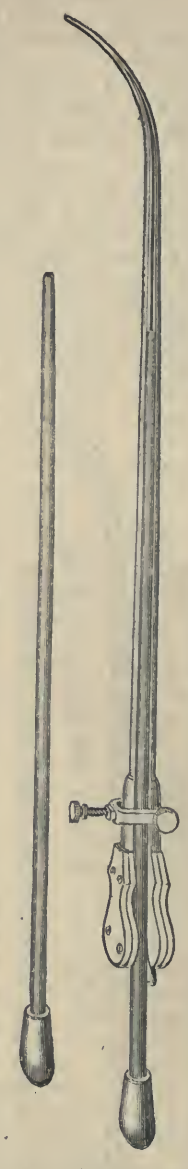
Before I leave this part of my subject, let me draw the reader's attention to the curious contradictions between Mr. Smyly's two authorities—Mr. Holt, by his admission that there is a conducting-rod, contradicting Professor Macnamara, who denied it in his paper, as I have already shown. While the Professor by stating that there was no conducting-rod for the "safe conduct" of the forcer, thereby implies that it is the conducting-rod which prevents the forcer slipping from between the blades, contradicts Mr. Holt, who asserts that there is nothing to prevent such an accident in Perrève's instrument, which, in his third objection, he admits has a conducting-rod !

I have just pointed out how Mr. Holt has contradicted himself !

To proceed—Suppose, for argument sake, that I admit such trifling distinctions in the mechanism of the instrument have been contrived by Mr. Holt, how is it that he made no allusion whatever to Perrève's instrument originally, and point out in it the "errors" which he has found it convenient now to discover ?

Let the reader compare fig. 2, copied from Perrève's plate, with fig. 3, copied carefully from the second edition of Mr. Holt's memoir, brought out in 1863, and ask himself—is it possible to conceive that the latter is not an unacknowledged reproduction of the former ?

Fig. 3.*



Mr. Holt further writes :—"The drawing Mr. Richardson has given" (fig. 3) "does not represent the instrument I now use, and although the principle is the same as Perréve's, the detail is so entirely different as to have insured the use of my modification with almost universal success, while that of Perréve has been entirely abandoned."

The drawing referred to—the largest of the two in fig. 3—which, with the separate forcer, I have had reprinted from my letter of the 12th of last month were traced by Mr. Oldham from p. 4 of the second and last edition of Mr. Holt's memoir. Three illustrations only appear in this edition—viz., the complete instrument, and the separate forcer, and a third, an altered handle, of which I shall speak by-and-by.

The two first were selected by me, because they are the latest delineations by Mr. Holt of the complete instrument, with forcer on conductor between the blades, and separate forcer, beside it, therefore, they were the only drawings published by him, suitable for clearly proving how deeply indebted Mr. Holt, was for his "new" dilator to the inventive genius of Perrève.

Mr. Holt's statement evidently proves my position, for his large illustration (of which fig. 3 is a copy), as he himself shows, and which will be seen further on, represents an instrument practically identical with Perrève's dilator, the conductor being solid instead of hollow, a difference between the two instruments I have never denied, and yet no allusion to Perrève was ever made by Mr. Holt until his letter to Mr. Smyly was published on the 9th of this month !

But, for argument sake again, let us admit that Mr. Holt's illustration of the complete instrument, copied by Mr. Oldham as in fig. 3, does not critically represent the instrument he now uses. I ask—Why did he introduce the illustration into the last edition of his memoir ? Simply because he well knew that, with the exception of the undisputed *hollow* conductor, it represents all the essentials of the instrument he "now uses," and, therefore, until he finds it expedient, in his letter to Mr. Smyly, to disown Mr. Oldham's *fac-simile* of his illustration he thought it sufficiently accurate for his purpose, as the following description of the illustration will manifest :—

"The instrument by which this simple process (splitting a stricture) is accomplished consists, as is shown in the drawing" (the disowned illustration), "of two grooved blades fixed in a divided handle, and containing between them a wire welded to their points, and on this wire a tube" (refers to the disowned illustration), ("which, when introduced between the blades, corresponds to the natural calibre of the urethra), is quickly passed, and thus ruptures or splits the obstruction." (Please compare with Perrève's description of his dilator in my letter of the 12th of last month.)

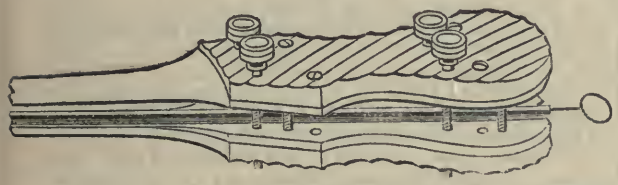
* Copied from the last illustration published by Mr. Holt of the complete instrument, and which is the engraving, he says in his letter, does not represent the instrument he now uses !

"Since the above was written," he goes on to say, "a very great improvement has been made in the construction of the instrument, in my opinion so great as to get rid of every objection that could be previously urged against it. In the former instrument" (refers to the disowned illustration) "it was objected that there was no positive evidence that the instrument was in the bladder, and the objection was a valid one, *although, in the hands of an experienced surgeon, such a difficulty could hardly occur.*"

I have marked the latter part of the paragraph in italics, because these words prove, that Mr. Holt thought the instrument which he now disowns, sufficiently safe in the hands of an experienced surgeon; and therefore, as *it* was a reproduction of Perrève's dilator, he likewise must have thought Perrève's instrument a perfectly safe one in similar hands!

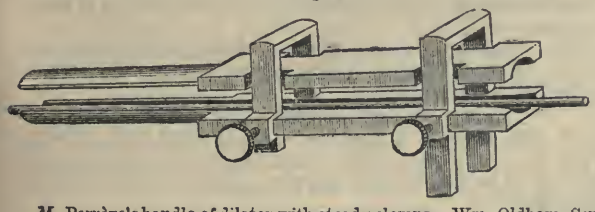
"But another objection," he writes, "was urged by some—viz., that it was possible for the tube to escape from between the blades of the dilator. This, also, as a *possibility* was true, but is now rendered quite impossible by the alteration that has been made in the handle; and as the dilator now acts as a catheter, and the tube cannot be displaced, the only objection that can possibly be urged is as to its introduction, and for this each individual operator must be responsible."—P. 7, ibid. This is what I suppose he alludes to in his second objection, by saying that in Perrève's instrument there is "nothing to prevent the tube slipping from between the blades." In this he is wrong, as not only is there the conducting wire, but also the safety clamps in their corresponding notches of each half of the handle, which are just as effectual for the purpose—indeed, in my opinion, more so—as Mr. Holt's new handle with its steady pins. Let the reader compare figs. 4 and 5, and judge for himself whether I am right or not.

Fig. 4.



Mr. Holt's new handle of dilator with steady pins. Wm. Oldham, Sep.

Fig. 5.



M. Perrève's handle of dilator with steady clamps. Wm. Oldham, Sep.

Mr. Holt's next statement is, that "although the principle" of his instrument "is the same as Perrève's, the detail is so entirely different as to have insured the use of" his "modification with almost universal success, while that of Perrève has been entirely abandoned." I have clearly proved that the details are not so entirely different as he represents, and as to Perrève's instrument being "entirely abandoned," this is a mere assertion without proof on Mr. Holt's part. He has not brought forward any evidence whatever to show, that the instrument had been ever prominently brought before the notice of the profession, or even *used* in the United Kingdom, and has not adduced one single well authenticated case of serious injury from a dilator constructed as Perrève directed.

Mr. Holt goes on to say—"Mr. Richardson has likewise alluded to the method of treatment, which here again is entirely different. Perrève did what Thompson is now doing, dilated rapidly. I, on the contrary, am *never* satisfied without the stricture is split."

I have never denied that there is a difference between Perrève's and Mr. Holt's *usual* method of using the dilator; but his assertion "that he is *never* satisfied without the stricture is split," is not in accordance with what he says in his book:—"Hitherto I have only considered the applicability of the dilator, so far as rupturing or splitting the stricture is concerned, but it is *equally efficacious* where dilatation is desired, and possesses an advantage over every kind of bougie or sound in its power of dilating a stricture to any required extent *without being withdrawn.*" (Ibid, p. 98.) "Having once introduced the dilator, its diameter can be increased to any extent the surgeon may desire; for this purpose *it is not necessary* that consecutive tubes" (forcers) "should be passed, as *by introducing at once* a No. 8 or No. 9, and very gently pressing the tube onwards, between the blades, they become separated to a considerable distance from the point of the tube." (Ibid.)

He continues to Mr. Smyly: "I conceive it to be a very great error to rapidly dilate strictures, and the quickness with which they re-contract when so treated justifies me in that conclusion." This appears to be approaching to another contradiction, for at p. 86 of his memoir, while speaking of the assumed advantage of his more rapid "splitting" method, he adds: "It is quite true that if the after-treatment is not attended to, the stricture will *sooner* or later recur."

Mr. Holt concludes his letter with the following observation: "Without wishing in the least degree to detract from the merits of Perréve's invention, I must assert that the instrument that bears my name is so far different from Perréve's, that in mine you have all the elements of success, while in Perréve's there are errors which have made its use unsafe, even in experienced hands." I have again to remind the reader that this is mere assertion; while Perrève, on the other hand, has recorded, that he used the instrument without fatal result in one hundred and fifty to two hundred individuals (*Traité des Rétrécissements organiques de L'Urètre*, p. 215, Paris, 1847) a success, by no means bad, from the use of an instrument which Mr. Holt says, has so many errors of construction; but which I have clearly proved is, with but one exception, practically identical with his "new stricture dilator!" and which he did not introduce to the notice of the profession until 1861.

To my mind, there could scarcely be found in our literature such an unacknowledged appropriation by one surgeon of the labours of another, as I have demonstrated with regard to Perrève's instrument.

Having now clearly exhibited the amount of obligation Mr. Holt has been under to M. Perrève's genius for the dilator which he uses, is it not, to say the least, ungrateful, for the former never to have alluded to the latter author, until the appearance of his letter to Mr. Smyly?

Not only has Mr. Holt omitted any allusion to M. Perrève, but he has introduced the "immediate method" of treatment in the following words, which speak for themselves:—

"The fatality that attends the uninterrupted course of a serious stricture, is but too certain. All practical surgeons are acquainted with the complications and suffering resulting from a disease, which, if taken in time, *is always amenable to treatment.* If, therefore, any means can be employed, by which all serious results can be obviated, and the treatment at the same time be made so simple as to be available by the majority of surgeons, it will, perhaps, be admitted that a step has been gained in the right direction. Hitherto I have not ventured to publish my experience of the plan I adopt, simply for the reason that it is injudicious *to enunciate any new method of treatment which has not been subjected to numerous trials.*" Again—"Up to the present time this method of treatment, though adopted by some surgeons, has been mainly confined to myself, simply,

I believe, from the fact that its general utility *never having been published*, it has not as yet been appreciated."

Lastly—"Being deeply impressed with the unsatisfactory nature of the prevailing methods of curing these distressing maladies, about seven years ago, I *adopted a more energetic mode of treatment, and invited the attention of the profession to a new "Stricture Dilator."* In effect—the same I have proved to be Perrève's, the theme of my communications.—I have the honour to remain, sir, your very obedient servant,

B. Wills Richardson

FIRST EXAMINATION

FOR THE

DEGREE OF BACHELOR OF MEDICINE.

OXFORD, DECEMBER, 1866.

Examiners.

George Rolleston, M.D.; Augustus Vernon Harcourt, M.A.; Robert B. Clifton, M.A.; Thomas K. Chambers, M.D.; John W. Ogle, M.D.; Henry W. Acland, Reg. Prof. Med.

NO. I.—PHYSICS.

1. Define a *lever*, and state its mechanical advantage. Into what classes have straight levers been divided? Describe the mechanism by which the human arm is bent and extended.

2. Describe the variations which the effective force of gravity undergoes in sustaining the motion of a simple pendulum.

How is the pendulum employed in determining the accelerating effect of the force of gravity?

3. Describe the common Hydrometer, and the method of using it.

4. When a fine tube open at both ends is dipped in a liquid, describe the principal phenomena observed, and state the laws which they are found to obey.

To what forces are these phenomena to be ascribed?

5. Describe the construction and action of a *free reed* organ pipe.

Explain upon the principle of the free reed the action of the human organs of speech.

6. Describe the structure of the eye, considered as an optical instrument, and trace the course of the pencils of light which produce the image on the retina, illustrating by a figure.

What is the nature of the defect known as *regular astigmatism*, what is its cause, how is it detected, and how remedied?

7. When plane polarised light, after passing through a tube filled with an aqueous solution of sugar, is plane analysed, what phenomena are observed?

Describe Biot's Saccharometer, and the method of using it for determining the amount of sugar present in diabetic urine.

8. Describe experiments shewing the conversion of work into heat (1) directly, (2) indirectly through electricity.

How much work must be done upon half a kilogram of copper (specific heat 0·095) in order to raise its temperature from 10°C to 20°C?

9. Describe any experiment which shews that when a liquid changes into a vapour heat disappears.

How is the latent heat of a vapour estimated? How has it been proposed to employ the absorption of heat attending the change from the liquid to the gaseous state as a means of destroying sensation in any part of the body, on which an operation is to be performed?

10. When a closed vessel containing a gas is heated at the bottom, explain how the gas becomes heated throughout.

In ventilating a room, at what places should the cold air be admitted? Give your reasons for your answer.

11. When a plate of copper and a plate of amalgamated zinc are placed in a vessel containing dilute sulphuric acid, state what takes place (1) when the plates are not connected, (2) when they are connected by a wire.

12. Describe Œrsted's experiment as to the action of an electric current on a movable magnetic needle.

Explain the construction of Nobili's astatic Multiplier.

In physiological research should the Multiplier be constructed with a long or a short coil? Give your reasons for your answer.

NO. II.—PRACTICAL CHEMISTRY.

1. Each of the tubes, *a*, *b*, *c*, contains a single substance.

2. Examine the solution *d* for iodine, and the solution *e* for morphia.

3. Prepare some carbonic acid gas, and determine approximately what proportion of this gas mixed with air is sufficient to extinguish the flame of a taper.

NO. III.—CHEMISTRY.

1. In what relation do the chemical elements stand to the other kinds of matter on the earth's surface? Why are air and water, respectively, no longer regarded as elements?

2. By what methods may oxygen be prepared?

3. What are the sources and properties of ammonia?

4. In what metallic solutions does sulphuretted hydrogen produce precipitates in presence of an acid? How is this gas prepared?

5. What are the principal constituents of coal gas?

6. Describe the mode of preparation and properties of iodide of potassium.

7. How is phosphorus obtained?

8. Explain briefly the method of spectrum analysis, and state some of the discoveries which have resulted from its application.

9. How would you ascertain qualitatively the chemical composition of a tubercle?

10. Write a short account of the principal chemical changes to which the name fermentation has been given.

NO. IV.—ANATOMY AND PHYSIOLOGY.

1. Give an account of the different ways in which the Nervous System may influence the functions of organic or vegetative life.

2. What do you know of the development, relations, and functions of the Eustachian Tube?

3. Write an account of the origin, course, and functions of the chorda tympani, the buccal, the musculospiral, and the obturator nerves.

4. What are the physiological limits within which the size of the liver may vary, and what are the conditions which produce such variations?

5. Trace the course taken by the chyle from its formation up to the spot where it is poured into the blood-vascular system.

6. Enumerate the different muscles, membranes, and vessels which you would meet with in dissecting from the external integument down to the level of Cowper's glands.

7. Give some account of the organisms known as "Infusoria," "Vibriones," and "Bacteria." What relations have they been supposed by different authorities to hold to the production and to the products of Fermenation and Putrefaction?

8. Explain what is meant by the Botanical Terms "Stomata," "Primordial Utricle," "Cambium Layer;" and give a short history of the physiology of the sap.

9. What are the distinctive characters of the classes Vermes and Arachnida? Specify parasitic members from each of these classes.

10. What are the main points of difference and what the main points of interdependence existing between the Animal and Vegetable Kingdoms?

NO. V.—ANATOMY.—PRACTICAL EXAMINATION.

1. Make such a dissection of the organ put before you as will enable you to demonstrate and describe the greatest number of its internal cavities and structures which are visible in one view.

2. Place under the Microscope some of the tissue of which the greater part of the organ you have dissected is made up; and state the points in which it differs from tissue bearing the same name in other parts of the body.

3. What does the Microscope enable you to predicate of the organisms contained in the jar labelled No. 1?

4. Write a description of the plants labelled 2, 3, 4, and give a short history of the Natural Orders to which they belong.

5. Describe at length the preparation labelled No. 5, specifying the functions which its several component parts perform in life.

6. Write a short description of the Museum-Preparations, Nos.

(To be continued.)

The Doncaster Dispensary is to be removed to the new infirmary on the 1st of May, upon terms to be arranged between the respective committees; but the two institutions are not to be amalgamated.

Medical Obituary Notices.

DR. W. MARSDEN.

This physician died on Wednesday week, worn out by a disease of long standing. Dr. Marsden established himself in practice nearly forty years since, at Thavies Inn, Holborn. He was the founder of the Free Hospital, in Greville-street, Hatton-garden, since removed to Gray's-inn-road, and known as the Royal Free Hospital. Dr. Marsden also founded the Cancer Hospital at Brompton, and was senior surgeon to both those institutions.

DR. BRINTON.

We regret to announce that Dr. William Brinton, F.R.S., died on Thursday last, at his residence, 24, Brook-street, London. Dr. Brinton had suffered for a long time past from disease of the kidneys, and his general appearance too clearly showed the existence of some serious malady. The acute symptoms which immediately determined the fatal result followed exposure to the cold in the late severe weather.

DR. ARTHUR MITCHELL.

We regret to learn that a further vacancy has occurred in the School of the Royal College of Surgeons of Ireland, by the death of Dr. Arthur Mitchell, which took place suddenly on Monday last. Dr. Mitchell had for many years filled the Chair of Botany in the Royal College of Surgeons, and as a Private Teacher in Materia Medica and Botany had contributed to the instruction of a large proportion of the Surgeons issuing from the Irish School. About twelve months since he was stricken with a severe attack of a cerebral nature, which, after comparative convalescence, has resulted in his decease.

THE *PALL-MALL GAZETTE* TESTIMONIAL.

The proposition which was started in our columns by Dr. Wilson, for a Professional recognition of the services of the *Pall-Mall Gazette*, has assumed a practical form in the letter which appears in our columns to-day. Great as the public services of the *Gazette* in this matter have been, they have done still more for our Profession in ventilating, with the great prestige of its independent opinion a crying abuse which would have received little attention coming from medical sources. Whatever form the gratitude of the Profession may assume, we trust it will be liberally displayed. Perhaps the most eloquent recognition would be a unanimous patronage of the journal by a permanent subscription from every medical man who feels the onus of thankfulness towards its proprietors. We shall most willingly co-operate in any scheme for this purpose.

Medical News.

Royal College of Surgeons of England.—The following gentlemen passed their primary examinations in Anatomy and Physiology at a meeting of the Court of Examiners on the 15th inst., and when eligible will be admitted to the pass examination :—

H. W. Diver, T. J. Pickburn, H. C. Hopkins, F. L. Thorne, George Wilks, and D. K. Robertson, of St. Bartholomew's Hospital; Philip Thompson, Ratcliffe Nuttall, Charles Ogden, Thomas Wilson, and J. A. Giddings, of the Manchester School; T. J. Gittens, C. E. Wing, J. O. O'Brien, and J. P. Garlike, of Guy's Hospital; E. C. Gamble, and C. J. Rhodes, of the Leeds School; George Payne, and F. A. Helsdon, of Middlesex Hospital; T. C. Bailey, and R. L. Edgeworth, of the Dublin School; J. W. Pratt, and J. G. Anderson, of St. Mary's Hospital; John Cascaden, and Titus Crooker, of Toronto; Julian Willis, of King's College; Frederic Smith, of London Hospital; J. E. Kenyon, of St. George's Hospital; Edwin Peacock, of Birmingham; and E. F. Chinery, of Edinburgh.

The following candidates passed their primary examinations on the 16th inst. :—

F. M. Wallis, G. T. Willan, F. W. Laslett, R. A. Painter, and A. W. G. Atkins, of Guy's Hospital; G. S. Walker, H. R. Moullin, W. H. Hubert, and W. E. Ledgard, of St. George's Hospital; J. J. Roy, H. D. Shelton, J. O. Sankey, and W. A. S. Blue, of St. Bartholomew's Hospital; R. D. Fox, and C. W. Calthorp, of Charing-cross Hospital; J. A. Williams, and E. J. Barrick, of Toronto; W. R. Davies, and J. B. Beavan, of University College; T. M. Watt, and W. A. Walker, of Belfast; G. W. Tacon, of London Hospital; W. H. Aston, of St. Thomas's Hospital; and Oliver Penfold, of King's College.

The following gentlemen passed the same examinations on the 17th inst. :

Charles Arthur Neason, of Guy's Hospital; John Levitt Davis, of the Charing-cross Hospital; Charles Turner Haddelsey, of the London Hospital; Henry Wintle, of Bristol; Henry Hemingway, of Leeds; and James Cornelius O'Grady, of Dublin.

It is stated that out of the 85 candidates who presented themselves for examination no less than 24 failed to acquit themselves to the satisfaction of the Court, and were consequently referred back to their anatomical studies for three months.

Apothecaries' Hall of London.—The following gentleman passed his examination in the Science and Practice of Medicine, and received a certificate to practise, on the 3rd inst. :—

Nettleship, Edward, Kettering, Northamptonshire.

On the 10th inst. :—

Stainthorpe, Thomas Edward, Hexham Abbey.
Summerhayes, Henry, Ealing, Middlesex.
Williams, William Edward, Llanhilleth, Monmouthshire.

The following gentlemen also on the same day passed their first examination :—

Walter Hart, King's College Hospital; J. C. M'Donald, Westminster do.

The cholera has disappeared from Carnarvon.

The cattle disease still continues in the East Riding of Yorkshire.

At a grand dinner recently given near Paris, the principal dishes were shark, horse, dog, and rat.

Two men have been killed by sulphuretted hydrogen, from working in a tank containing sulphate of ammonia, at some chemical works at Bow.

At the Kent Annual General Sessions, held last week, it was stated there are now 758 lunatics in the Maidstone Asylum.

Removal of Quarantine at Gibralter.—Free *pratique* is allowed upon arrivals from Southampton with clean bills of health.

A few weeks ago a man arrived in Ararat (Victoria), with 28,000 leeches, which, in three days, he caught in a large lagoon.—*Sydney Herald.*

At the weekly meeting of the City Commissioners of Sewers, on Wednesday week, Dr. Letheby reported that 1109 houses had been inspected during the past four weeks, that 155 places required sanitary improvement, that 12 out of 150 ships were found in a filthy condition, and that 14,222 lbs. of meat had been condemned as unfit for food.

Ten cases of the cattle plague have been reported by the official inspectors, and it would appear that the disease is still confined to one district—the East Riding of Yorkshire. Since the outbreak of the plague 253,817 animals have been attacked, while 52,656 healthy cattle have been slaughtered to prevent the spread oi the disease.

The Spanish frigate *Resolution* has put in at the Falkland Islands with upwards of one hundred cases of scurvy on board under treatment, and it is reported that thirteen of them had terminated fatally. This vessel had been engaged in blockading the coasts of Chili and Peru. It is also reported that all the Spanish vessels employed on that service had suffered greatly from scurvy, and had lost many men.

We are informed, by one who ought to know, that last autumn a medical man of station drew the attention of the local police to a foul drain passing close by the house, at Wardie, of Mr. Alexander Smith, the poet, and assured them that cholera, diphtheria, or typhoid fever would prevail if it were not cleansed. It was, we believe, by one of these discreditable disorders that Mr. Alexander Smith has been carried off.—*Builder.*

A LAKE of borax has just been discovered in California; it is believed that the find is destined to revolutionise the important trade in that article. The Californians are turning their attention to the cultivation of olives, and boast that they can produce olive oil equal to that of Italy.

FEMALE LONGEVITY.—The obituary in the *Times* has lately exhibited some marvellous instances of prolonged existence in both sexes, but nothing in comparison with those which appeared on Wednesday last, where the deaths of seven ladies were recorded therein, whose united ages amounted to 612 years, and if to this number be added that of another woman whose death was reported the preceding day at 102 years of age, we have a total of 714 years, giving an average of exactly 89 years and three months to each, an amount of longevity perhaps unprecedented in the record of two consecutive days' obituary in this paper. On Thursday, the deaths of twelve persons were recorded—viz., three ladies and nine gentlemen—whose united ages amounted to 1030 years, giving an average of 85 years and ten months to each of these twelve persons. The oldest lady was 92, and the youngest 80 years of age. Of the opposite sex, one had reached 91, and the youngest 81 years of age.

A DEPUTATION from the Harveian Society will shortly wait upon the Home Secretary to lay before him the principal conclusions of their committee upon infanticide and infant mortality. The abolition of capital punishment for infanticide, and the substitution of various terms of penal servitude, the modification of the bastardy laws, the improvement of the workhouse maternity system, the registration of dry nurses, and the supervision of infant nurseries, are among the more important changes suggested.

THE *Moniteur de l' Hygiene* states that a number of sempstresses have been suffering from violent colics from putting they silk they use in sewing into their mouths. This is attributed to sulphate of lead, and the presence of that deleterious substance is explained by the fact that, as the silk is sold by weight, some manufacturers mix the sulphate with it to make it heavier.

Notices to Correspondents.

Dr. Maxwell.—Your request shall have immediate attention.

Dr. Owen Fox.—A note has been made for January 27th.

Dr. F. W. Mullar is thanked.

A. G. Hesiliege Buckby, Esq.—Thanks for your contribution in aid of the "sad case" in our advertising columns. It shall be forwarded as desired.

C. Ede, Esq.—Your communication shall receive immediate attention

Mr. Hawskley's note has been carefully considered.

Dr. A.—Opinions differ on this point, time alone will prove its efficacy. Pending certain inquiries, we think it unjust to criticize.

Mr. J., London, is referred to Mr. Baker Brown's note in our correspondence columns.

Enquirer.—The subject of "phantom tumours" is fully discussed in "Montgomery's Exposition of the Signs and Symptoms of Pregnancy," second edition, 1856. Longmans, Paternoster-row. There are other books in which the subject is mentioned, but probably in none so fully as this.

Mr. Woolcott.—It shall receive attention.

Dr. Lade.—The papers will be of no use.

Dr. C. is thanked.

Appointments.

BENNET, W. F., M.R.C.S.E., has been appointed Senior Resident Surgeon to St. Pancras Workhouse and Infirmary, vice W. F. Butt, M.R.C.S.E., resigned.

DAY, W. H., M.D., has been appointed an additional Visiting Physician to the Infirmary for Consumption and Diseases of the Chest, Margaret-street, Cavendish-square.

EVERETT, B. G., M.R.C.S.E., has been appointed Medical Officer for District No. 3 of the Chailey Union, Sussex, vice W G. Tiley, M.R.C.S.E., resigned.

FITZGERALD, Mr. C. E., has been appointed Resident Scholar at Sir Patrick Dun's Hospital, Dublin, vice Edge, deceased.

GREAVES, C. A., M.B., has been appointed Visiting Surgeon to the Derby Union Infirmary and Workhouse, vice J. Lindley, M.R.C.S., resigned.

MOORE, C. H., F.R.C.S.E., has been appointed Visiting Surgeon to St. Luke's Hospital for Lunatics, vice J. Luke, F.R.S., F.R.C.S.E., resigned.

PATCHETT, H., L.R.C.P.Ed., has been appointed Medical Officer for the Billington District of the Blackburn Union, Lancashire, vice J. Cannell, L.F.P. and S.Glas., resigned

PEARSE, Mr. G. E. L., has been appointed Demonstrator of Anatomy at the Westminister Hospital, vice Mr. F. Teevan, resigned.

RITCHIE, W. B., M.D., has been appointed to the Commission of the Peace for the Borough of Belfast.

SEATON, D., M.R.C.S., of Oakham, Rutland, has been appointed Surgeon to the Rutland County Gaol.

SINGLETON, W., M.D., has been elected Medical Officer to the Cappaduff Dispensary District, Co. Mayo.

WARDEN, C., M.D., has been elected Honorary Surgeon to the Birmingham and Midland Counties Lying-in Hospital and Dispensary for the Diseases of Women and Children, vice W. C. Orford, M.R.C.S.E., resigned.

WOODHOUSE, T. J., M.D., F.R.C.S., has been appointed Assistant-Surgeon to the 1st Surrey Artillery Volunteer Corps.

Vacancies.

Fulham Union—Medical Officer for Walham-green District.
Langport Union—Medical Officer for No. 3 District.

Medical Diary of the Week.

ROYAL INSTITUTION.

TUESDAY.—Jan. 22nd, at three o'clock, Professor Tyndall, "On Vibratory Motion."

THURSDAY.—Jan. 24th, at three o'clock, Professor Tyndall, "On Vibratory Motion."

FRIDAY.—Jan. 25th, at eight o'clock, Professor Odling, "On Mr. Graham's Recent Discoveries on the Diffusion of Gases."

SATURDAY.—Jan. 26th, at three o'clock, G. A. Macfarren, Esq., "On Harmony."

HUNTERIAN SOCIETY.

WEDNESDAY.—Jan. 23rd, 7½ P.M. Special Council Meeting—8 P.M. Mr. Hinton, "An Outline of the Present Methods of Diagnosis and Treatment in Aural Surgery." —Dr. Peacock, "On the Diagnosis of Obstructive Disease of the Mitral Valve, with a Case."

BOOK RECEIVED.

Hebra on Diseases of the Skin, &c. Published for the New Sydenham Society. 1866.

Births, Deaths, and Marriages.

Announcements are inserted without charge, and must in all cases be authenticated with the signature of the sender.

BIRTHS.

FULTON.—On January 19, at Saintfield, the wife of Thomas Fulton, M.D., of a daughter.

HOUGHTON.—On December 30th, 1866, at 6, Mount-street, the wife of Henry G. Houghton, M.D., of a daughter.

WILKINSON.—On December 24th, 1866, at Greenheys, Manchester, the wife of M. Eason Wilkinson, M.D., of a daughter.

WORTHINGTON.—On January 9th, at Worthing, Sussex, the wife of G. F. G. Worthington, Esq., of a son.

MARRIAGES.

THOMPSON—JAMES.—On January 3, the Rev. Henry J. Thompson, M.A., of Dodford, Northamptonshire, to Sophia Mary, eldest daughter of Edward James, M.D., of Edgbaston.

WAHLTUCH—GOLDSCHMIDT.—On December 16th, 1866, Adolphe Wahltuch, M.D., of Manchester, to Anna, second daughter of H. S. Goldschmidt, Esq., of Frankfort-on-the-Maine.

DEATHS.

ATKINSON.—On January 6th, at Great Marlow, Benjamin Atkinson Esq., Surgeon, J.P. for the county of Bucks.

MARTIN.—On January 7th, at Ventnor, Isle of Wight, George Anne Martin, aged 59.

PICKTHORN.—On October 21st, 1866, at Auckland, New Zealand, G. Russell Pickthorn, M.D., Assistant-Surgeon H.M.S. *Challenger*, aged 27.

VISE.—On January 6, at Spalding, Lincolnshire, Charles Vise, Esq., Surgeon, aged 64.

WILSON.—On January 8, at Ilkley, Yorkshire, James Wilson, M.D., of Malvern.

FISHER.—On January 17, at his residence, No. 5, Appian-way, Upper Leeson-street, Dublin, Thomas Fisher, Esq., M.D., Assistant-Librarian Trinity College, aged 66 years.

JENINGS.—On the 17th ult., T. Jenings, M.R.C.S.E., late of Denbigh-street, Pimlico, aged 54.

ROSS.—On the 31st ult., J. T. Ross, M.R.C.S.E., late Assistant-Surgeon Royal Naval Hospital, Simon's Bay, Cape of Good Hope.

EDGE.—On the 1st inst., at Sir Patrick Dun's Hospital, Dublin, Mr. G. B. Edge, one of the resident pupils, aged 22.

BELLIS.—On the 9th inst., Benjamin Bellis, M.R.C.S.E., of Kidwell's-park, Maidenhead, aged 60.

BLICK.—On the 9th inst., at Islip, Oxfordshire, Thomas Curle Blick, M.R.C.S.E., L.S.A., aged 57.

CLINICAL LECTURES

DELIVERED IN

STEEVENS' HOSPITAL,

TOGETHER WITH

OBSERVATIONS ON PRACTICAL MEDICINE.

By Sir HENRY MARSH, M.D., Bart.,

PHYSICIAN IN ORDINARY TO THE QUEEN IN IRELAND.

Edited by J. STANNUS HUGHES, M.D., F.R.C.S.I.,

PROFESSOR OF SURGERY IN THE ROYAL COLLEGE OF SURGEONS IN IRELAND, SURGEON TO THE LORD LIEUTENANT'S HOUSEHOLD.

(Continued from page 73.)

REMARKS ON CHLOROSIS AND HÆMORRHAGE.*

THE following general remarks on chlorosis and hæmorrhage were suggested by some cases of these diseases which were treated in the medical wards of Steevens' Hospital during the last session.

Chlorosis is an affection of frequent occurrence and great interest; and though it has been repeatedly investigated by several distinguished pathologists, many points of considerable importance in its history yet remain to be explored and explained. We shall retain the name chlorosis as, perhaps, the best we can adopt; it is, doubtless, one derived from a symptom, yet a symptom so invariably present that it sufficiently designates the disease. This is not the only instance in which we deem it necessary or convenient to employ the name of a symptom, as expressive of the disease which gives rise to it; we may cite for example, jaundice, dropsy, and paralysis. It is sometimes better to retain even an objectionable word than to encumber science with new and often uncouth terms. We shall not speak of chlorosis as synonymous with anæmia; the former refers to a specific disease, the latter bespeaks a state of the system, either general or local, which may arise during the progress of several diseases; it was introduced into our vocabulary by the eminent physician Andral, and (though not etymologically correct) is too useful and convenient a term to be parted with. There are many cases of chlorosis marked rather by an increase than a diminution of the total amount of the circulating fluid. In chlorosis there is a change in the quality, but not necessarily a change in the quantity, of the blood; so that chlorosis must be looked upon as a peculiar and distinct disease, and not identical with anæmia. In like manner hyperæmia is a convenient term to express a surplus of blood, generally or locally, but it is not expressive of any particular disease; and in speaking of hæmorrhage in contrast with chlorosis, as we propose to do, it is necessary to draw a marked line of distinction between hæmorrhage—which sometimes arises even when general anæmia exists—and the state of hyperæmia.

It has been already remarked that there is no proof of deficiency of blood in chlorosis; on the contrary, there is strong presumptive evidence that an actual excess of blood, though of inferior quality, characterises some cases of the disease; and it is worthy of remark, that in the treatment of chlorosis, the moderate abstraction of blood by the lancet, by leeches, or by cupping, not only does not aggravate the symptoms, but so far from this, when incidental affections demand depletion, is followed by the best effects. The disease in reality consists, not in a diminished quantity of blood, but in an altered quality—a diminished consistency of this fluid; herein lies its very essence, and any term which signifies the former, not the latter condition, is at least objectionable as applied to chlorosis. In chlorosis the blood undergoes a very remarkable change; its specific gravity is lowered; the clot is small and firm; the serum bears too large a proportion to the crassamentum; water is in excess; the red corpuscles are far below the healthy standard in quantity; their appearance, however, under the microscope, is natural; and the fibrin, in the majority of cases, is normal in quantity, firmness, and cohesive power.

In hæmorrhagic diseases, the chemical and physical characters of the blood are very different. Its specific gravity is seldom much below, and occasionally even exceeds the healthy standard; the separation into clot and serum is imperfect, and the clot bears too large a proportion to the serum; the quantity of fibrin is less than in healthy blood, or, at least, its proportion to the red corpuscles is less than is found in a state of health; the quantity of red corpuscles is either absolutely increased, or their proportion to the fibrin is larger than in healthy blood; and the quantity of solid constituents frequently exceeds that of the normal fluid. The clot is, in general, large, soft, and of a dark red, or almost black colour; sometimes the formation of a clot does not take place; a buffy coat is scarcely ever observed, except when fever or inflammation is present; and the serum is frequently tinged with red by the presence of red corpuscles in suspension. Under the microscope, the red corpuscles are most commonly seen of small size, with their edges lacerated and irregular; mingled with these are numerous shrivelled, apparently empty, colourless cells, the walls of which are of extreme delicacy.

These facts respecting the characters of the blood in chlorosis and hæmorrhage are established by the well-conducted experiments and accurate analysis of Andral, Gavarret, Denis, Lecanu, Simon and others; and have been corroborated by numerous observations made in the hospital by Dr. Hill, under my own superintendence.

The following briefly noted cases will, on comparison with each other, serve to illustrate the distinguishing characters of chlorosis and hæmorrhage :—

Mary Callaghan, aged 17, a domestic servant, of middle stature, spare habit, and chlorotic appearance, was admitted into Steevens' Hospital, August 2, 1845. The integuments are of a sickly white, waxy hue with a slight tinge of yellow on those parts which are most exposed to light. The extremities are habitually cold and moist, especially the feet, which, she says, are never warm. She complains chiefly of constant frontal headache; pain, with tenderness on pressure in the hypogastric region, chilliness, languor, and weakness in the back. The tongue is pale and moist, the appetite delicate, nausea frequent, and bowels always confined. Respiration performed twenty times in a minute; no cough nor pain in either side, and the respiratory sounds healthy. Pulse 96, feeble; heart's action tranquil whilst she is at rest, but any sudden exertion or emotion produces violent palpitation. The first sound of the heart is accompanied by a loud, rough *bruit*, which varies much in intensity at different periods, and under different circumstances of excitement, but has been present, more or less, at every examination. There is no evidence of hypertrophy of the heart, nor can any murmur be detected in the arteries or veins. There has been no appearance of the menstrual discharge for the last eight months, previously to which time it was always regular, and she is unable to account for its cessation. She has never suffered from leucorrhœa, nor observed any tendency to œdema in any part of the body.

Urine is passed in natural quantity; is of pale, limpid appearance; specific gravity at 64° Fah., 1008; faintly reddens litmus paper, and is free from albumen. She states that, notwithstanding the derangement of the uterine functions, she enjoyed tolerable health until four months since, when she began to suffer from headache, nausea, and general debility. Four ounces of blood were taken from the arm, and the following observations made :—

Temperature of atmosphere . .	64° Fah.
„ under the tongue .	100° „
„ in the axilla . .	95° „
„ of blood as it flowed .	97·5° „
Specific gravity of blood at 75°, Fah. . .	1·031.
Specific gravity of serum at 64°, Fah. . .	1·025.
In 1031 grains of blood,	
The weight of serum was . . .	760 grains.
The weight of the clot,. . . .	271 „

* The Dublin Quarterly Journal of Medical Science, Nov. 1st, 1846. Reported by John Hill, A.M., M.B.

being in these proportions of 1000 to 356·5. These proportions were taken twelve days after venesection.

The blood, when flowing, seemed nearly as thin as water, and was of a bright florid colour, resembling that of arterial blood. The clot was very small, firm, of a dark reddish colour, and without any appearance of buffy coat. The serum was transparent and colourless. Under the microscope the characters of the red corpuscles were normal.

P. Conolly, aged 22, a weaver, of spare habit, but florid complexion, was admitted into Steevens' Hospital, July 17th, 1845. The entire surface of the body, excepting that of the face, hands, and feet, is thickly covered with brownish red petechiæ, mingled here and there with small, more deeply seated, and dark coloured ecchymoses. At the upper part of the forehead are several broad red patches, covered with furfuraceous scales. The gums are soft, spongy, of a purple colour near their junction with the teeth, and bleed freely whenever he masticates any hard substance. The tongue is clean and red; no petechiæ are observed within the mouth. He is very subject to epistaxis, a severe attack of which, two days ago, induced him to apply for admission into hospital. His appetite is good, and his bowels usually regular, but at present they are confined; in other respects his general health appears unaffected. Pulse 76; heart's sounds normal. Respiration 18 in the minute. He states that, during his childhood, he was occasionally subject to epistaxis, and that, about seven years ago, he first observed a number of small red spots upon his arms, which he, at that time, mistook for flea bites; these spread in successive crops all over his body, and shortly afterwards he became subject to frequent hæmorrhage from the nose, gums, and bowels. He says that the spots fade and die away sometimes, but that, ever since their first appearance, he does not remember having been totally free from them for more than a few weeks at a time. Previously to the commencement of the disease he was in very distressed circumstances; of late years, however, he has been able to earn a comfortable subsistence. Four ounces of blood were taken from the arm:

Temperature of the atmosphere . . .	63° Fah.
„ under the tongue . . .	97° „
„ of blood as it flowed . . .	98° „
Specific gravity of blood at 64° Fah. . .	1·054
„ of serum at 64° „ . . .	1·027
In 1054 grains of blood,	
The weight of serum was	238 grains.
The weight of the clot	816 „

being in the proportion of 1000 to 3428·5. These proportions were taken twelve hours after venesection. The blood, as it escaped from the vein, appeared thin, and was of a florid red colour. The clot was very large, soft, black, and soluble in water. The serum held a great number of red corpuscles in suspension. Under a high magnifying power, the recent blood exhibited a great number of ruptured corpuscles; their general size was, however, normal. In a drop of the tinged serum were seen numerous red corpuscles, of which about one-fourth were of natural size and appearance; another fourth were of natural size, but with lacerated edges and irregular surfaces; whilst the remaining two-fourths were of small size, not exceeding the dimensions of the central nucleus of a normally-sized red corpuscle. There were, in addition, numerous thin, membranous cells, empty and corrugated, floating in the serum.

These cases exhibit in strong contrast the characters of the blood in the chlorotic and hæmorrhagic conditions. They are extreme cases, and are given as such; in other instances which we have examined were observed degrees of contrast, from the minutest shade of difference to the extreme amount now portrayed. The most striking distinctive character is in the specific gravity of the blood; in the chlorotic case it was 1031; in the hæmorrhagic case 1054; but there are other remarkable differences, and these are at once recognized by a reference to the examination made. We do not profess to give a minute chemical analysis of the blood; our object is to mark the prominent and distinctive characters in each condition of the blood, and thence we hope to arrive at useful practical deductions.

From the pathological state of the blood which characterises chlorosis, many interesting phenomena spring; upon these, in succession, we shall make a few observations and practical remarks.

The first important symptom which we shall notice, as a consequence of this imperfect sanguification—this deficiency of the red corpuscles—is the low degree of animal heat. Well-marked chlorosis is distinguished by an universal chilliness; the extremities are, in many cases, insuperably cold; and scarcely are they warmed by exercise or artificial heat till (the loss by radiation and evaporation not being supplied by the blood) they again become destitute of animal heat. Even in bed this coldness of the extremities remains for hours, and prevents sleep. Sometimes they are deadly pale and dry; at other times swollen, livid, and clammy; but in either case they are characterised by a very low degree of temperature. The whole condition of a chlorotic patient in many respects resembles that of a cold-blooded animal. There exists also a marked incapability to bear extreme ranges of atmospheric temperature. So long as the blood continues in the deteriorated state which constitutes the essence of this affection, the individual ceases to possess that power of adaptation to climatic extremes which distinguish the human race. To such persons summer heats and winter colds are distressing and intolerable; they thrive best in a dry, invigorating, and moderately warm atmosphere; and their sufferings would be much mitigated were the air they breathe always of an uniform and medium temperature. In the treatment of chlorosis much advantage is derivable from remedies capable of supplying this deficiency of animal heat: for example, from warm pediluvia, frictions, shower-baths, and such covering of the body as shall not debilitate, and yet prevent the too rapid escape of caloric by evaporation or radiation; but above all, from well-regulated exercise, both equestrian and pedestrian, not exceeding the then existing physical powers, but gradually augmented as these powers by habituation acquire force. To these should be added, when practicable, travelling and daily quick transitions through the air, as in an open carriage, so as to stimulate the lungs, and improve the respiratory and circulating functions.

The importance of this mode of treatment is shown by the following observations, quoted from Simon's "Animal Chemistry":—"When there is a paucity of corpuscles, the necessity for the absorption of oxygen is diminished in a corresponding ratio, the circulation becomes slower, and there is less heat developed than in the normal state; on the other hand, blood with an excess of corpuscles, but which is circulated slowly, developes less heat than blood which contains a smaller proportion of corpuscles, but which is more rapidly circulated, for more oxygen may be consumed in the latter than in the former case."

The production of animal heat is unquestionably much influenced by the rapidity of the circulation, as well as by the quantity of blood corpuscles. Of this we may convince ourselves by a reference to the researches of Prevost and Dumas on the relation between the mass of corpuscles and the temperature in various animals. For instance, in the goat the amount of blood corpuscles is considerably less than in man; but the temperature of the former exceeds by four or five degrees that of the latter. This may be accounted for by the fact that, in the goat, the pulse is, by ten or twelve beats in the minute, quicker; and respiration, by six in the minute, more frequent, than in the human subject.

Becquerel and Breschet have also ascertained, by means of a thermo-electric multiplier, that each contraction of a muscle is accompanied by an elevation of temperature amounting in some instances to 2·6°. In this manner we may, perhaps, account for a portion of the increased temperature that succeeds active exercise.

When the blood has undergone the morbid changes described, when the red corpuscles are deficient and animal heat imperfectly supplied, it follows as a necessary consequence that the nervous and muscular systems, being sup-

plied with deteriorated blood, should exhibit in their functions a corresponding degree of depression. If this be closely investigated, and due allowance made for the different degrees of activity which belong constitutionally to different individuals, it will appear that in every real case of this disease, there is a varying amount of energy abstracted from the brain, nerves, and muscles, and indicated by languor of mind and lassitude of body. To form a correct estimate it must be founded on comparison of what the individual had been in health, and now is when labouring under chlorosis. In the severer and more advanced forms of the disease the contrast is most striking.

There are two remarkable symptoms which, to a greater or less extent, are, I believe, always present in chlorosis, namely, palpitation of the heart and dyspnœa, on making exertions such as in health would be utterly incapable of producing these effects. In many cases the palpitations produced by ascending even a few steps of stairs are exceedingly distressing ; in some instances the dyspnœa is the more urgent symptom ; they are, however, generally found to co-exist and to be caused by very slight muscular exertions and mental emotions. The varied disturbances of the heart's action constitute a very prominent symptom ; nor is this opposed to what we might anticipate when we consider how much altered are the constituents, and consequently the stimulus, of the circulating fluid. We also find that the pulse is often quick, small, and weak ; for, though the contractions of the heart occur in rapid succession, the blood wave propelled at each systole is diminished and powerless. In an early stage of the disease, when the patient is quiescent, the pulmonary and cardiac motions are tranquilly and often languidly performed ; the heart and lungs, however, partaking of the general enfeeblement, and receiving and circulating an impoverished blood, exhibit signs of hurried action and disturbance when even a very slight amount of augmented labour is exacted from them. But when the chlorotic affection is further advanced, when the general torpor is increased, and the blood reduced to a very low degree of attenuation, then the breathing and the pulse become permanently disturbed and quickened.

To the same sources may be referred the derangement of the assimilative function—the diminished appetite, the slow performance of digestion, and the inactivity of the intestines. The constipated state of the bowels is a very constant symptom ; it has even been asserted that purgatives alone are capable of curing the disease. That they are in many cases useful, often highly so, experience has fully established ; the assertion that they are to be solely relied upon, all experience contradicts. In a very large proportion of cases the first curative step is to evacuate thoroughly the intestinal canal ; and to effect this purpose such medicines should be employed, assisted by enemata, as will insure sufficient action of the bowels without depressing the vital powers. Cases of chlorosis occasionally occur in which diarrhœa, or a tendency to it, prevails ; these, however, are exceptions to a general rule, and may be traced, in the majority of instances, to constitutional predisposition, to unwholesome, indigestible food, or to atmospheric vicissitudes. Diarrhœa is not properly a symptom of the disease. The more the respiratory functions and the condition of the blood are improved by appropriate treatment, the more certainly will the appetite and intestinal actions be approximated to the normal state. The diet best suited to a chlorotic patient merits consideration. The appetite and digestive powers being enfeebled, it is necessary that the quantity consumed at each meal should not exceed the assimilating powers of the stomach ; the food should be well masticated, and consist in articles of diet most highly nutritive. In some there is a distaste to solid animal food ; then the substitutes provided should contain in small bulk as much nutritive matter as posssible, that thus the object in view—to enrich the blood without overloading the stomach—may be attained. When the stomach can receive and digest them, tender, old, and gravy meats, and game, claim a preference. In regulating the diet of the chlorotic patient, much stress should be laid upon the necessity of supplying animal heat more abundantly. It should then be the opposite of that which in tropical climates is provided by nature, and more in accordance with that used in cold climates ; hence articles of food abounding in carbon, such as butter, cream, oil, and fat, should be mingled with the daily food, in quantities not exceeding that which the stomach is fully capable of digesting. For the same reason, unless forbidden by some constitutional peculiarity, good wine, and brandy and water, should be liberally allowed ; porter and ale suit some individuals better, and attain the same object. These are the cases in which I have seen the most decided advantage from brandy and new milk taken early in the morning ; in many such cases too the Oleum Jecoris Aselli has been particularly beneficial. The diet then in chlorosis should be so regulated that, without oppressing the stomach, the blood may be enriched and animal heat promoted.

(To be continued.)

Original Communications.

A CASE OF RESUSCITATION AFTER TWO HOURS' APPARENT DEATH BY DROWNING,

OCCURRING IN THE LATE CATASTROPHE AT REGENT'S-PARK.

By JOHN DENNAN, Esq.

On the afternoon of Tuesday, the 15th instant, about a quarter past four, I received, in the absence of Mr. Obré, a summons to view a dead body just withdrawn from the ornamental waters in Regent's-park.

While on the way I entered somewhat minutely into the particulars with my guide, and on my arrival determined to examine the subject very carefully.

The man was apparently *quite dead*, and I heard the following statement, viz.:—that he had left his abode in perfect health, and joined in the general amusements on the ice, and was one of those at some distance from the shore when the catastrophe occurred. I particularly observed that the patient was intensely cold, from having been immersed some minutes, and having struggled in the water for more than half an hour. There was neither breathing or heart's action, the pupils dilated, the jaws clenched, and the limbs contracted, so much so that the clothes had to be cut off before anything could be done to the patient.

A frothy mucus covered the mouth and nostrils, the body was much swollen and I had it placed on an incline at an angle of about 35°, as the body was so very cold. I commenced, with the assistance of the two men who brought him home, to try to restore warmth by degrees, rubbing the chest and limbs thoroughly and swiftly with ice and snow, cleansing the mouth and nostrils from time to time, and adopting Silvester's method of artificial respiration for more than two hours. After a quantity of frothy mucus was discharged slight signs of animation were perceptible though so faint that I almost despaired.

I then had him well wrapped in blankets, placing large tins of hot water at the feet, and mustard poultices on the chest, while the body was well rubbed with warm flannel under the blankets. I continued this treatment for three-quarters of an hour, at the same time continuing to imitate the movements of breathing. A decided improvement then took place. The patient's jaws relaxed, and he appeared to breathe more freely. I then administered two teaspoonfuls of warm water, which caused him to vomit slightly. As soon as he commenced breathing freely I was able to give him a little warm tea, which he apparently relished. I may here observe that I could not induce him to take spirits.

The patient was now placed in a warm bed prepared for him, soothed to sleep, and all undue excitement prevented.

The patient was feverish for one or two days, but on the following Friday I had the pleasure of receiving a visit from him.

FARADIZATION AND GALVANISM.

By W. H. SANDHAM, M.R.C.S.

Reading the cases of partial paralysis and hemiplegia, published in The Medical Press and Circular of the 14th Nov., 1866, by Dr. Althaus, of the London Infirmary for epilepsy and paralysis, and a case of lead paralysis, successfully treated by Professor Banks, of Sir Patrick Dun's Hospital, led me to the following remarks and report of a few cases successfully treated by me:—

It is time that gentlemen reporting cases treated by Faradization or Galvanism should, for the benefit of the initiated, and in order not to mystify, and so mislead students of medical electricity, be more minute and explicit in stating the instrument and the exact current used.

Faradization, for instance, may be effected by an electro-magnectic, a magneto-electric, a friction, or a galvanic battery. That is not all, it may be produced by an inverse or a direct intermittent current from any one of these batteries, and they may be applied with one pole on the spine, and another on any part of the body, or one pole at the origin of a nerve or muscle, and the other at the peripheral extremity of the former on the centre or insertion of the latter. I have given the treatment of disease by electricity some study, yet I am often at sea as to the instrument, the current, or the mode of application used in, I may say, most of the cases reported; so that future reports of cases would be far more valuable were the reporters more particular in naming the instrument, the particular current, and the mode of application.

HEMIPLEGIA.

I treated a lady lately who fell down suddenly in her bedroom, and was taken up hemiplegic on the right side. Her arm was permanently flexed to an acute angle, the fingers almost stuck into the palm, her leg powerless, and foot so clubbed that when on the ground it rested on the outer edge; muscles of the face and tongue unaffected; sensation and heat of the whole side normal, or rather more than the opposite side. She was treated by various medical gentlemen, and twelve months after the first attack I was consulted. The muscles of the superior extremity were much wasted, and in the flexed position described, while the inferior extremity was so swollen and œdematous that from the thigh down was one shape, it could only be moved by her attendant. On the third application of the inverse interrupted current of the primary wire of an electro-magnetic apparatus, I could, with the greatest ease, extend the forearm and fingers at pleasure. The leg continued longer insensible to the current, but this too improved rapidly; the œdema of the limb entirely disappeared, and she could now lift it and make a kick at you herself. I used the interrupted current, and the continuous uninterrupted current of a galvanic apparatus on alternate days. The muscles of arm and leg became defined, as the lady herself used to say, "This arm is now more plump and round than the other." But at this stage of progress, some kind friends, who possessed too much brains, interfered, and she gave up the treatment, all because she suffered a little severely during the application of the interrupted current—notwithstanding the evident improvement. While treating this case I was forcibly struck with the idea—in fact, convinced—that in such cases as the one described, we come to the conclusion that one half the body is paralyzed, but I now think this a very erroneous diagnosis. Take the arm in this case: it is permanently flexed from the moment of the fall. Is this evidence of paralysis? Nay, rather evidence against it; for after passing an interrupted current for a few minutes along the extensors, I could extend or flex the limb and fingers at pleasure—proving either that the extensors alone were paralyzed, or that the flexors were permanently flexed by spasm, caused by spinal irritation without paralysis of the extensors at all; the current at all events either suppressed the spasm or restored the paralyzed extensors, so that the one antagonized the other, as in health. I am now disposed to think this was not a case of paralysis at all, but a state of parts produced purely by spinal irritation. The lady's intellect, speech, sight, digestion, and circulation, were healthy. I think this view of helpless limbs much overlooked, and very suggestive to a thinking mind. I here put this idea before my medical brethren, in hopes others may reflect thereon, and give us their experience; for so forcibly struck was I by this case, that I conclude we often arrive at a wrong conclusion, when on seeing one who has lost the control of a limb or the power of locomotion, that paralysis is always the cause, when permanent spasm, consequent on spinal irritation or injury at the origin of a nerve, may be the cause.

DISTRESSING FACIAL NEURALGIA.

Over a month since a Cork gentleman consulted me. He had most acute facial neuralgia of right side; sometimes it was intense in the temple, sometimes in the upper, sometimes in the lower jaw, and again immediately in front of the ear. It commenced about nine months ago. He did everything that was recommended to him; among the rest he took ten dozen of quinine pills, used liniments, mustard, and other plaisters, stupes, &c. At length he was recommended a sea trip, and so anxious was he to get well that he forsook his business, and at considerable loss and expense sailed for Rotterdam; but he suffered all the way, and returned as bad as ever, when some party who I before cured recommended him to me. I treated him with a direct continuous galvanic current along the three branches of the fifth nerve. The very first application afforded relief, and after a week's treatment (daily application) he said "that he had not such a week for months." I repeatedly asked him had he any bad teeth on that side. His reply always was "No." But conceiving I used to hunt, as it were, the pain into or by the side of two teeth, I came to the conclusion something was there wrong that again lit up the neuralgia after I had removed it, and I discovered that when a cold body touched near the teeth a pain shot through them, and so lit up the neuralgia again. I gave my opinion that unless two small teeth were extracted I could not permanently cure the neuralgia. He consented, and with a key instrument, along which I conducted a galvanic current for about five minutes, I lugged out the two teeth at once. I applied galvanism on two successive days, so that after nine applications he continues well to this date. His own words are—"I am in Heaven." No medicine whatever administered.

FACIAL NEURALGIA OF THREE MONTHS STANDING.

Mrs. C——y, Cork, came to me after three months' intense suffering from facial neuralgia, for which she had been treated by several medical men. When I first saw her the side of the face and about the ear was greatly swollen, and profuse purulent discharge from the ear, with intolerable pain in side of face. I used a direct continuous galvanic current daily for a week. The first application removed all acute pain, and the swelling and discharge rapidly disappeared. She continues well to this hour. No medicine given.

SEVERE LUMBAGO OF THREE MONTHS' STANDING.

Mr. M——, Cork. After three months' suffering from lumbago, consequent on spinal irritation, during which time all that the ingenuity of his intelligent physician could suggest was tried, he sent for me. After the fifth application of a direct continuous galvanic current, and without the aid of any medicine whatever. On the fifth day he was able—free from pain—to be out of bed, and to attend to his business; and after the ninth application I left him well, and he still continues so; this is now several months past. But to enumerate the number of cases successfully treated by me in Cork would be tedious and unnecessary after the many already reported by me in The Medical Press and Circular, and the *Electrician*. Suffice it to say, that electricity as a therapeutic agent, scientifically administered, cannot any longer be neglected; and I am astonished beyond measure, in the face of the vast mass of evidence

in its favour, that a single medical man can be found bold enough to ignore it in the present day, but it is only those who are unacquainted with what it is capable, venture to do so. Lately, in consultation with two medical gentlemen, in a case where the patient had not a half hour's real sleep for a couple of months (notwithstanding that one of them tried a large proportion of the drugs in the Pharmacopœia to produce it), and was suffering from intense dyspnœa, owing to pure spasm of the respiratory muscles. On proposing galvanism one of them replied :—"Oh ! it hurries the circulation too much." The other—"Oh ! it stimulates too much," &c., &c. Still I persevered, and galvanism allayed the dyspnœa, and secured a sleep that lasted from eleven o'clock P.M. to nine o'clock A.M., next morning. Surely this was not a coincidence : did sleep follow because three medical men met in consultation ? Certainly not. I look upon electricity as so important an agent in the treatment of disease, that were I one of the court of examiners attached to any of the universities, I would reject any candidate for a medical or surgical degree who could not give evidence of his having well studied electricity as a remedy in disease.

Hospital Reports.

GUY'S HOSPITAL.

SYPHILITIC DISEASE OF SKULL; PARALYSIS OF PORTIO DURA; ABSCESS OF MASTOID PROCESS; ABSCESS OF LUNGS.

(Under the care of Mr. HINTON.)

Mary B., aged 28, married, pale and cachetic, was admitted into Guy's Hospital, under the care of Dr. Rees, on the 19th of July, suffering from febrile symptoms, deafness, and indications of abscess behind the ear. She was ordered carbonate of ammonia, with lemon-juice, to be taken during effervescence, and transferred to the care of Mr. Hinton, who saw her on the 25th, when she gave the following history :—

She had no children. Eight years ago suffered from syphilis, and probably again since that date. When a child remembers falling two or three times into a cellar, and being stunned; but since then felt no ill effects until about two years ago, when she became deaf in the right ear, and paralysis supervened. Nevertheless, there was neither pain nor discharge at that date ; both these symptoms came between nine and ten months ago. On the appearance of the discharge the paralysis recovered, and on its cessation returned, but went away again on the removal of the discharge. Considers she has been deaf for two years. Still suffers at times from pain in the ear, and a great singing noise, but this is not constant. Has noticed this particularly for the last nine months, and is quite sure it was not present when she became deaf two years ago. Considers her left ear all right. She relates three severe fits, with foaming at the mouth, &c., but has had none since the discharge began, though just before that she had "had fits" every day. The discharge first began when she was lying down; it burst suddenly—"went off like a cannon, and blood and corruption came." For three months before this the pain had been very intense.

About a month ago a medical man had ordered a blister, which was kept on six hours. She had overworked herself, and suffered from very severe pain in the forehead and vertex. She felt weaker after the blister, and continued to get worse until she obtained admission to the hospital. A little while before being admitted had coughed up blood. Her family is not unhealthy. She belongs to a family of nine. Two of her brothers have had affections of the ear.

At this time (25th) the hearing distance of the left ear was six inches. The *membrana tympani* was healthy, and rather pale. The click of the nail was heard by the right ear when quite close. The membrane of this ear was pearly in appearance, and perforated ; the air passed freely through it. There was no redness nor swelling around, but considerable tenderness was detected behind the ramus of the jaw. The discharge was profuse, and very fœtid, with all the characteristics of that arising from diseased bone. The throat was healthy, but the mucous membrane unusually pale.

She was allowed nourishment, and six ounces of wine daily.

℞ Linimenti ammoniæ, ℥vj.
Chloroformi, ℥ij. M. Fiat. lin.
℞ Liq. potassæ permanganatis, ℥xx.
Aquæ, ℥j. M. Fiat. lotio.

27th. The lotion has partially removed the fœtor of the discharge ; the liniment has produced a little redness ; no change.

30th. Much worse ; seems quite prostrate ; a good deal of low fever ; pulse 108 ; cough has come on again, with purulent but not fœtid expectoration ; discharge from the ear now consists of thick pus ; there is fulness below and just behind the ear, with tenderness on pressure; has had cold shiverings six or seven times during the day ; the discharge seems much increased ; she blows through easily ; there is no redness, neither is there tenderness on syringing ; has some pain inside the head and on the top.

A free incision was made over the mastoid process, at the inferior part; the skin was very thin ; the bone was not rough ; no blood flowed, except from the lowest portion of the incision ; linseed-meal poultices were ordered.

31st. Complains of pain in the right side of the chest, and has again spat a little blood.

The click of a nail can now be heard at a distance of two or three inches, and she thinks she is getting her hearing again, which she has not had for years.

August 3rd. The pain in the head has been much less ; the incision healed at once ; there is still tenderness over the mastoid process ; to-day she had a severe rigor, and says it was like she used to have when her cough was very bad.

4th. Discharge as profuse and offensive as ever ; no change in the appearance of the ear ; the water used to syringe it passes out through the nose ; she can now hear the click of the nail at twelve inches distance ; no paralysis of the face. She had discovered that on pressing behind the ear in a certain way she could force out the matter. Pressure, not over but behind the mastoid process, directing the finger upwards and forwards, produced a stream of thick pus, running two inches down the neck, and this without causing her much pain.

The mist. conii of the hospital pharmacopœia was ordered to allay her cough.

5th. Pressure in the same spot still forcing out pus of the meatus, an opening was made, and between three and four ounces of fœtid pus evacuated. The probe passed in inferiorly to the distance of an inch and a-half, and a little roughness was perceived on the bone. A poultice was applied. The water employed in syringing the wound did not escape at the meatus; nor on blowing with meatus closed did air escape through the wound.

8th. Weaker ; gradually sinking ; no rigors since last account ; local symptoms continue much the same; there is much discharge both from the meatus and the opening ; not much tenderness ; exhaustion, in fact, has set in. She died without further pain.

Post-mortem.—On removing the calvarium it was found to present numerous nodosities, probably of syphilitic origin, as shown by the history. The cerebrum was healthy. The dura mater covering the right lateral sinus was discoloured. The cerebellum in contact with it was also discoloured to the depth of about half an inch. Beneath the microscope there were found in this part very numerous free cells of small size, partly altered blood globules and partly pus cells, no large granule cells. The lateral sinus contained firm adherent clot, and the blood was coagulated in several adjacent vessels. The part of the jugular vein immediately connected with it, contained several firm and

altered clot and was thickened; lower in the neck it was healthy. In each of the lungs were several abscesses, containing offensive pus and some of them involving the pleura. Their structure generally soft and infiltrated. No abscess found in any other part. It may be here remarked that the patient died with symptoms more resembling phthisis than those of secondary inflammation.

Shortly before the case took so rapidly fatal a turn, the question of opening the mastoid process was raised.

On examining the right petrous bone it was found to be destroyed for a space of an inch and a-half by three-quarters of an inch, in the situation of the lateral sinus and jugular fossa and in the cavity was contained a *sequestrum*, about the size of a hazel nut, and of an irregular form. The soft parts around were sloughing. The mastoid process was reduced to a mere shell of bone about two lines in thickness, and its posterior surface destroyed. There was free communication from the cavity into the tympanum, a passage passing upwards into it divided below into two by a septum of bone, one opening towards the mastoid process, the other more internally. The roof of the tympanum was dark and infiltrated, and its cavity contained dark thickened and softened membrane, and masses of firm pus-like matter; membrana tympani destroyed to the extent of about three lines by one and a-half below the malleus, forming a crescentic opening. The malleus was perfect. Stapes scarcely movable from its vestibular aspect. Tensor tympani had no muscular fibres, but exhibited clear fibroid degeneration. The vestibular sacculi were rather dark in colour, and when removed found to be thick and pulpy. Beneath the microscope they showed no pus cells. Compared with the membranes of the opposite side, this is of an opaque, dark and granular appearance exhibiting all over many cells (the vestibular epithelium), but seeming enlarged as if swollen or soft, here and there nucleated, and in some cases granular. Some of them were no doubt blood-discs. There were many nerves traversing the mass. These are mostly enlarged, headed, and granular, as if soft and swollen, a few fibres remain small; several large blood-vessels ramify throughout.

The bone on each side showed a peculiarity of form about the meatus internus which was unusually large and spiral in shape. This was most marked on the right side, and on this there ran from the meatus to the apex of the bone, a thin and sharp curved ridge, a great exaggeration of the natural crest of the bone.

The *portio dura* seemed loosened in its course through the bone. It was *drawn out from the meatus internus* on to the anterior surface of the bone in the act of removing the dura mater, *i.e.*, almost all of it, and the remainder readily came on traction. It could also be drawn slightly at its exit. It seemed healthy throughout, even at its exit, though here it lay close to, though not involved among, the diseased soft parts.

The internal carotid artery had its coats thickened as it passed through the diseased parts, but was otherwise healthy.

The jugular vein in this situation had also thickened coats, and was moreover filled with a firm adherent mass, not containing pus, nor any softened substance, so far as could be judged.

The left ear appeared moderately healthy in all respects.

METROPOLITAN FREE HOSPITAL.

Cases under the care of Dr. C. R. DRYSDALE.

WASTING PALSY OF THE RECTUS FEMORIS, &C., FROM A BLOW.

November 30th, 1866.—William Mullens, 25, received a blow on his left thigh in front, two years ago, from a piece of iron under a steam hammer. Since that date he has suffered from pains of the thigh. He now is unable to walk, or go on with his work as a pattern-maker. When the patient is seated there is seen to be complete wasting of the triceps extensor of the thigh, and when the thigh is raised by the psoas and iliacus muscles, the shape of the femur is clearly marked through the integuments and wasted muscles. All the other muscles of the thigh are healthy; there is a difference of two inches in the girth of the two thighs at one foot below the head of the feum. The patient in other respects healthy and muscular.

CARCINOMA OF THE SIGMOID FLEXURE OF COLON.

Robert C., 52, seaman; seen 4th January, 1867. Patient has suffered from profuse diarrhœa for three months past. Was formerly for some time in the East Indies. He has no straining or tenesmus, nor any blood in the stools. The stools, which he brought for inspection, were quite fluid, slightly coloured, and resembled rhubarb and magnesia mixture. Of these stools he has had as many as thirty a day, and he has not passed a solid motion for three months. Does not vomit, and is not emaciated, although thin; used to weigh 11st. 10½lbs., but now weighs only 10st. 7lbs. The finger passed into the rectum does not detect any stricture, nor does the rectum bougie passed in a little further. On examination through the parietes of the abdomen there is a feeling as if there was an inelastic substance in the left iliac fossa. Dr. Drysdale said he thought that this was a case of malignant disease of the colon in the region of the sigmoid flexure.

Foreign Medical Literature.

TWO CASES OF ABSCESS IN THE ANTERIOR ABDOMINAL WALL, IN CONSEQUENCE OF THE PRESENCE OF A FOREIGN BODY WHICH HAD BEEN SWALLOWED, AND WHICH PERFORATED THE INTESTINAL CANAL.

Communicated by Professors SANTESSON and KEY.

Translated from the *Hygiea* for June, 1866,

By WM. DANIEL MOORE, M.D.Dub. et Cantab., M.R.I.A.,

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(Continued from page 78.)

In addition to the changes in the ileum already described in the loop attached to the abdominal wall, three smaller dark blue spots, about 6mm. in length, and situated close to one another, are found in the jejunum, three feet from the duodenum. The uppermost of these is completely healed, with a loss of substance of mucous membrane, of the extent of a pin's head, in the centre. In the two inferior spots is found a similar loss of substance in the middle, and the mucous membrane is at the same time undermined throughout the whole extent of the spots. From one, moreover, a fine canal passes to an abscess of the size of a pea, in the attachment of the mesentery, filled with an ashy mass, similar to that in the hepatic flexure. Below these spots the mucous membrane in the jejunum is somewhat thickened and softened, of a reddish grey colour, with superficial diphtheritic exudation on the valvulæ conniventes. The change gradually diminishes in the ileum, and ceases somewhat below the attached loop of intestine, the mucous membrane of the ileum exhibiting in its lower half only a slight swelling of the solitary glands, and in spots a somewhat greater injection than usual. In the uppermost part of the jejunum the mucous membrane presents no remarkable change.

The mucous membrane of the stomach has a perfectly healthy appearance, nowhere presenting any trace of the passage of the pin. In the œsophagus, on the contrary, there is found, about its middle, a longitudinal rent in the mucous membrane about two centimètres (·787416″) in length. In the middle of this is seen a small cicatrix-like

contraction. In the two extremities of the rent, on the other hand, the extremely sharp and even edges of the mucous membrane are removed from each other scarcely a millimètre, but are everywhere perfectly attached to the fundus. In addition to the above-described changes in the intestinal canal and abdomen, important processes are met with around the spleen, in the vena portæ and liver.

Over the spleen lay the transverse colon drawn up and firmly adherent throughout a great extent to the diaphragm. In connection with this the spleen too was also attached by its edges and a great part of its upper surface, by means of firm membranes, to the diaphragm. On detaching these membranes a large diffuse cavity is found, partially filled with pus, between the spleen and the diaphragm. The diaphragm is here, through an extent of 8½ centimètres (about 3⅓″) in diameter, completely perforated, the perforation presenting lumpy, softened, reddish grey edges, and the hole is so bounded superiorly in great part by the inferior surface of the lower lobe of the left lung, which in its periphery is everywhere adherent to the diaphragm, that the purulent collection above the spleen is diffused through the pleural cavity itself. But posteriorly under the diaphragm and through its crura the pouch of pus communicates around the spleen with the purulent passages already described, which, after having passed under the edges of the tenth and eleventh ribs, open into the subcutaneous abscess given exit to by incision in the lumbar region of the ileum.

The capsule of the spleen is on its upper surface, looking towards the purulent collection, greatly thickened, opaque, discoloured, and in one place destroyed throughout the extent of a two-farthing piece. From this point an abscess of the size of a pigeon's-egg is continued into the substance of the spleen, which partly contained a turbid, purulent fluid, resembling that about the spleen, partly consisted of a cheesy, greyish yellow, tolerably firm mass, still adherent to the rest of the substance of the spleen. The spleen is, moreover, rather enlarged, tolerably firm, of a dark reddish grey colour, with slightly prominent Malphigian bodies, but a coarse trabecular system. A large venous branch, proceeding from the apex of the abscess above described, was filled with a thick, puriform, embolic mass, which extended into the splenic vein. A couple of other venous branches also in the spleen were filled with partly firmer, partly half broken up emboli, which in the cavity were connected with the first mentioned thrombus. The splenic vein is at its origin rather highly dilated with thickened walls. The above described emboli entering it are continued at first merely on one side into a thin, ashy layer, adherent to the wall, but at the distance of some centimètres from the hilus the vein becomes almost completely filled with an embolus, which continues as far as the trunk of the vena portæ. It is in general adherent to the venous wall, but on the under side is free from it, leaving a narrow passage open for the stream of blood, which comes from the non-obstructed venous branches in the spleen. In this passage lay, as further proof that a current of blood had passed along the thrombus, a loose, fresh filamentous coagulum. The embolus itself is in the central parts in a half broken up state, of an ashy, opaque, greyish yellow ; in its periphery it is, on the contrary, firmer, and of a reddish grey colour. At the inosculation of the mesenteric veins it terminates for the greater part in a rounded off extremity, which projects into the vena portæ, which, moreover, in its whole trunk and in the commencement of most of its branches is invested with a thin layer of a perfectly pus-like, rather viscid mass, adherent to the walls. In places the walls of the vena portæ are indeed preserved, but through a very great extent, and this is even the case in the commencement of some branches to the right lobe, the venous walls are completely destroyed, so that the boundary is formed of surrounding connective tissue, covered with an ashy, pus-like substance, like that of the remaining venous walls. Where the complete destruction of the venous walls ceases, these are, through a longer or shorter space, loose, softened, and as it were infiltrated with pus. Several of the venous branches in the liver so altered in the commencement, have subsequently their calibre perfectly free throughout their whole course, with walls of normal appearance, and around their ramification too no greater changes are visible. Otherwise, in the somewhat destroyed liver, both superficially and in its substance, foci of sizes varying from that of a hen's to that of a pigeon's egg, in which a great number of small abscesses, from the side of a hempseed to that of a pea, lie scattered, are met with. They are in general sharply defined, and separated from one another by a whitish-grey and tolerably firm sclerotic tissue. The venous branches leading to these foci, which are in general rather thickened, are in many places filled with a greyish white, ashy mass, like that in the trunk of the vena portæ. Here and there a mud-like substance can be expressed from the finer venous branches, even in places where no abscesses exist. Otherwise the hepatic substance is tolerably firm, of a reddish grey colour, with some tendency to yellow ; in parts the acini are surrounded with intensely red, somewhat depressed rings, in their centres strongly inclining to yellow.

In the mesenteric veins, which were dissected up as far as possible, no traces of emboli were anywhere found. The kidneys were pale and healthy.

On opening the chest the lungs collapsed tolerably perfectly. The left lies with its lower margin drawn up on the diaphragm pushed up to the level of the fifth rib, and is about the lower surface everywhere adherent at the periphery to the diaphragm. In the pleural sac a couple of ounces of clear serous fluid were found.

On separating the lung from the diaphragm an encysted abscess was found, as before described, communicating with the abscess around the spleen. The pleura was to a corresponding extent very much softened, of an opaque greyish red, with some slight losses of substance, which were continued into the pulmonary substance, and were there bounded by an eroded, opaque, grey, thin, and tense layer of pulmonary tissue. The lower lobe of the lung is through an extent of one and a-half cetimètres next its under surface atelectic, yielding on pressure a small quantity of non-ærated fluid. Moreover, the lung in the posterior parts is rather œdematous, but otherwise its parenchyma is healthy. The bronchi contain a tolerably large quantity of catarrhal secretion. In the infero-posterior margin of the right lung is found a small hard, reddish grey focus of hepatisation of the size of a pea. Otherwise the parenchyma in this lung also is healthy. The bronchi contain here also a tolerably copious secretion. The heart is rather smaller than usual, the subpericardial fat is changed into a loose, gelatinous substance The muscular structure is pale and firm. There is nothing else to remark.

If we now endeavour to put together the results of the post-mortem examination, and to compare them with the history of the case communicated by Hr. Santesson, it will first of all appear evident that the pin found in the abscess in the abdominal wall was the cause both of the changes immediately about it, and also of the other morbid processes. Neither can there be any doubt that the pin reached its present situation by perforating the intestine, after having been swallowed. Had it penetrated from without the woman would certainly have been aware of it, little sensible as she seems to have been. Moreover, the bowel within the place where the pin lay bears evidence of its passage. The pin seems here, even after it was brought into a transverse direction, to have several times penetrated the intestine, but to have again got free, before it finally perforated the bowel. The one dark spot reproduces so exactly its form, that it seems impossible that it could have occurred in any other manner than by the pin penetrating under the mucous membrane into the submucous tissue. Above the place where the pin perforated the intestine but little trace was found in the digestive canal of its wandering. The slit described with cicatrization in the œsophagus appears, however, to be scarcely explicable in any other way than that it was caused by the pin. That it was produced by some sharp substance which had been swallowed is certain. The dark-blue spots found in the jejunum cannot with any certainty be referred to lesions of the pin, for they may easily have occurred from the intense inflamma-

tion of the peritoneum, which caused, among other things, the abscesses in the attachment of the mesentery, propagating itself on the intestinal wall with such violence as to give rise also to submucous abscesses, causing secondary losses of substance in the mucous membrane. In this manner, no doubt, did the similar changes occur in scattered parts of the colon and rectum with the perforations found there.*

That the pin in its passage caused an intense local peritonitis, with adhesion of the intestine, follows from the history of the case compared with the results of the post-mortem examination; but these latter show likewise that general peritonitis set in at the same time, which subsequently underwent occasional exacerbations, producing the extensive lesions in the true pelvis, and here and there abscesses in the mesenteric attachment, and phlegmonous inflammations in the intestines, with the changes described around and in the spleen. As to the changes in the true pelvis, it is most remarkable that during life they gave rise to such slight symptoms. It is, indeed, probable that for the most part they set in during the last six weeks after the exacerbation, in the middle of January, as well as that the perforation of the rectum was the cause of the severe diarrhœa, which began thirteen days before death, and which was afterwards kept up both by the follicular colitis and by the enteritis.

The intense purulent perisplenitis with perforation of the diaphragm, formation of abscess in the spleen, embolus in the splenic vein and suppurative pylephlebitis, is of special interest. As to the origin of the perisplenitis it would appear that it ought to be referred tolerably far back, and the process must here, as well as in the true pelvis, be considered as a local increase of the general peritonitis produced by the irritation of the pin. Even from November and the beginning of December, the history of the case records symptoms which must be attributed to inflammation around the spleen, but it was not until January that this became extremely aggravated, producing, as was assumed, a considerable purulent encysted effusion, which pushed the diaphragm upwards, and compressed the lung, until by gravitation of the pus backwards, and incision in the lumbar region, the matter in part gained an exit. Contemporaneously with this exacerbation, if not before it, the splenic abscess set in, causing thrombosis of the veins of the spleen; and, secondarily, through emboli and continued thrombosis, the suppurative pylephlebitis, symptoms of which seem to have occurred shortly after the exacerbation in the middle of January, although they were so obscure that this affection, as so often is the case, could not with certainty be diagnosed. We have here, therefore, a fresh case, where a suppurative pylephlebitis was occasioned by an abscess in the spleen. Some years ago I communicated such a case, and to this time, so far as I know, in addition to these two cases, only four similar ones are known, which I quoted in my former paper. (*Hygiea*, 1862, p. 257.)†

But in the present case the pylephlebitis possesses a very special interest, for it shows that, in a breaking up thrombosis with suppuration around it, not merely the detritus mass of the thrombi, but actually genuine pus, may be added to the blood, a circumstance which does not tally with the theories commonly current. It is, in fact, said, that when suppuration sets in, in consequence of a breaking up thrombus in a vessel, the products of suppuration remain, after the destruction of the vascular walls, "in general" hindered from being directly added to the blood, by continued obstructing thrombi which confine them. (Virchow, Weber, &c.)

An indirect proof that the pus perforating a vascular wall in thrombosis may enter the circulation of the blood is thus indeed supplied, but as it appears to me not very decisively. The case now before us is particularly favourable to this view. Thus, in the trunk of the vena portæ the inner membranes were partially destroyed, and the boundary was composed in part of adventitious portions of the inflammatorily altered connective tissue in the immediate vicinity. On microscopic examination, these tissues were now seen to be highly infiltrated with pus cells, and in towards the calibre they were in a state of complete purulent change, so that no well-defined demarcation was found between them and the pus-like ashy mass, consisting almost exclusively of pus cells which covered the walls. The boundary of the cavity traversed by the current of blood was therefore here a connective tissue, suppurating or in a state of purulent disintegration; and as the vast majority of the branches of the vena portæ were completely permeable, the products of suppuration, or the pus, must also have been conveyed directly into the mass of the blood. The microscopic examination of the vascular walls themselves where these were in a state of disintegration, in the neighbourhood of places where they were already completely destroyed, was especially interesting. A large venous branch to the right lobe, in the commencement of which all the membranes were destroyed, was examined with particular accuracy. At the very limit of the destruction the inner coat projected more than the other membranes, and terminated in a ragged margin, floating when water was poured on. Fine transverse sections, which are preserved in the museum here, exhibited through all the membranes, strong infiltration with pus cells, which at a greater distance from the suppuration became fewer. Even the innermost membrane was altered in the same manner, particularly close to its ragged margin, and there was no difficulty in convincing one's self that the cell-proliferation proceeded, as in endarteritis, from the normal elements in the membrane itself. Finally, that the inner coat was destroyed by an actual purulent disintegration was therefore evident. In the venous branch examined, not a trace of thrombi or emboli was found in its whole course from the spot where the suppuration took place, and where its dilated cavity, as in the portal trunk, was covered with a puriform mass, nor in its seat of ramification and in its circulation could the blood through it convey pus. I hope soon to be in a position to treat somewhat more fully of the latter subject so interesting in itself, which has here formed only an episode, though a fearful episode, in "l'histoire d'une épingle."

In connection with the foregoing, a similar case, which, however, terminated in recovery, may here be mentioned.

A housekeeper from the country, aged 63, had in the month of June, 1864, come to Stockholm to seek relief for an abdominal affection, from which she had suffered for rather more than six months. The symptoms at first resembled most closely those of cardialgia; tenderness and pain in the epigastrium, in connection with lancinating pains both there and in the corresponding part of the back. On exercising or working she was most troubled with these symptoms, especially if the stomach were empty, although they also occurred readily after taking food. A feeling of tension and fulness beneath the breast, with extreme tenderness on pressure in the epigastrium, came on after some time, accompanied, although more rarely, with water-brash, nausea, and loathing. Finally, an extremely tender swelling appeared in the vicinity of the ensiform process, gradually increasing in extent, scarcely allowing her to dress herself, as her stays and hoops constantly pressed upon the painful part. This was the immediate cause of her determination to seek relief in the capital. As the physician to whom she first applied, on examination, found a tumour in the pyloric region, of considerable elasticity, extremely painful on pressure, and, as it seemed rather diminishing in size thereupon, he referred the patient to me (Santesson), thinking there might possibly be a rupture, or something else "surgical" in the case. I visited her at her house, and then found that the swelling must in great part contain fluid, even though concealed by that, something else might possibly be in the back ground. The tumour, which was oval, extended from the lower extremity of the sternum, in the direction of the linea alba, for somewhat more than four

* According to a chemical examination made by Prof. Stenberg, the crust deposited on the pin was found to contain lime, oxide of zinc, and oxide of copper, combined partly with phosphoric and partly with carbonic acid.

† The reader who may wish to refer to the paper above alluded to, will find it translated *in extenso* in The Medical Press, January 7 and 14, 1863, pp. 4 and 28.

inches, towards the umbilicus, its greatest breadth was nearly three inches. Over the margin of the ribs, particularly on the left side, there was great tenderness on pressure. Otherwise the part was in good condition and looked healthy, nor did the patient exhibit any disease in any other organ. I introduced an explorative trocar in the most prominent and fluctuating part of the tumour, which, however, gave exit to nothing; but after the canula was removed and blown through, it was seen that it contained some drops of viscid, yellow pus, too thick to admit of its passing through the small tube. It was now evident that we had to deal with an abscess. Its gradual development, in connection with other characters, and the great tenderness over the margin of the ribs, led to the suspicion that the formation of pus depended on necrosis in some adjacent cartilage or rib. I then advised the patient to seek admission into the hospital, where she was inscribed on the 23rd June, 1864.

The tumour was now opened with an incision a couple of inches in length in the middle line, whereupon between four and five ounces of laudable pus were discharged. The cavity of the abscess was not continued to any distance, nor could any rupture or other connection with the abdominal cavity be discovered. The walls were smooth, for the most part lined with a "concrete pus," extending upwards and to the left side in the connective tissue without the peritoneum behind the ensiform process and the margin of the ribs. No denuded bone or cartilage was anywhere met with. Moist, calefacient fomentations, replaced at night by poultices, constituted the whole treatment, taking care at the same time to keep the incision open, as the latter showed a great tendency to close over the purulent cavity which was not yet filled up. The secretion from this continued to a tolerably considerable amount for about three weeks after the operation. On probing the wound a little later the margin of the seventh costal cartilage on the left side was found denuded, but no portion of it was separated. In addition, the probe encountered a solid, movable body, which was impacted in a wall of the cavity, and which, after having been taken out by Acting-Assistant P. A. Enestrom, was found to be a fish bone, about an inch in length, forming part of a rib of some kind of large fish, such as a pike. The bone had evidently been long exposed to the action of the pus, for its two extremities were almost dissolved by maceration to the state of brittle, pencil-like bristles, and there can be no doubt that this foreign body, perforating the wall of the stomach, or possibly some other part of the intestinal canal near the stomach, had been the original cause of the abscess in the abdominal wall. The patient herself could not recollect any occasion on which she had observed any difficulty or pain in or after taking food. After the bone was removed the purulent secretion rapidly diminished; the cavity gradually contracted, so that on the patient's dismissal from hospital, on the 21st of the following August, it was all but healed. Later in the autumn I learned from her mistress that the cure was complete, and somewhat more than a year after I was informed that the patient continued perfectly well.

MEDICAL GLEANINGS.

(From the British and Foreign Medico-Chirurgical Review.)

ANATOMICAL AND PHYSIOLOGICAL INQUIRIES RESPECTING THE MOTOR NERVES OF THE UTERUS.

By Dr. THEODORE KORNER.

Dr. Korner observes that the uterus in the human subject is supplied by two sets of nerves; one, proceeding from the inferior mesentric ganglion of the sympathetic, the other proceeding from the middle sacral nerves. These two sets unite in a plexus, the branches of which are distributed over the rectum, bladder, upper half of the vagina, and the portio vaginalis uteri. Numerous ganglia, the presence of which has been alternately admitted and rejected, are clearly visible in various parts of the uterine structure, when this has been treated with vinegar, and a weak solution of bichromate of potash.

Dr. Korner's physiological experiments upon the above nerves were chiefly undertaken in rabbits, in which animals he found the distribution of the nerves to agree in all essential respects with that of the human subject. The chief results at which he appears to have arrived, after a course of inquiry extended over a considerable period of time, are :—

1. That electrical excitation of the branches of the sacral nerves distributed to the uterus are constantly followed by contractions of that organ. 2. That electrical excitation of the branches of the sympathetic nerve distributed upon and embracing the aorta, is also constantly followed by contraction of the uterus. On the other hand, section of these two sets of nerves renders it impossible to excite uterine contractions by electrical excitation of the spinal cord. These two sets of branches must therefore be regarded as the only motor nerves of the uterus. 3. Irritation by electricity of any portion of the spinal cord is followed by uterine contractions, providing only that the motor nerves distributed to the uterus are uninjured; and contractions are induced with greater facility in proportion as the central part of the lumbar region of the spinal cord is approximated, which is to be considered as the point best adapted for the induction of uterine contractions by electrical excitation. 4. Each of the two above-mentioned sets of nerves—the sacral spinal and the sympathetic—possess motor branches for the muscular tissue of the uterus proper to themselves, for if either of them be divided uterine contractions can still be occasioned by applying electrical excitation to the other, though in the case of the sympathetic branches the agency exerted seems to be an inhibitory or regulatory one, bringing movements already commenced to a stand-still. 5. The sacral spinal branches for the supply of the uterus leave the spinal cord in the region intermediate to the third and fourth lumbar vertebræ. The uterine branches of the sympathetic, on the other hand, leave the cord at about the level of the last dorsal vertebra, as is shown by the fact, that on section of the spinal cord above this point electrical irritation of the upper segment is no longer followed by uterine contractions.

As regards the presence of a central cerebral nucleus for the excitation of uterine contractions, Korner's experiments do not lead to the supposition that any such exists, but he found that contractions of the uterus could be induced by electrical stimulation of the medulla oblongata, cerebellum, pons varolii, corpora quadrigemina, crura cerebri, corpus callosum, optic thalamus, and corpus striatum, but that the contractions were more easily called forth in proportion as the point irritated approximated the medulla oblongata.—*Heidenhain's Studien des Physiolog. Instituts zu Breslau*, 1865, p. 1.

ON THE INFLUENCE OF THE NERVOUS ACCESSORIES ON THE MOVEMENTS OF THE HEART.

By R. HEIDENHAIN.

Heidenhain commences his paper by observing that without entering into a discussion of the whole subject of the existence or non-existence of inhibitory or regulatory nerves, he is desirous of recording a few observations, which, whilst they appear to him to militate against the exhaustion theory promulgated by Schiff, yet seems to favour the view that the pneumogastric nerves are not inhibitory, but motor nerves, so far as regards the heart. He describes the rough anatomy of the roots of the pneumogastric and spinal accessory nerves in the rabbit, and the relations of their trunks to one another. He states that the accessories in rabbits can be torn out by the roots with the greatest facility, whilst this is more difficult to accomplish in dogs, in consequence of the fibrous nature of the passage by which it leaves the skull in those animals. The accessory nerves are doubtless the special motor nerves of the larynx, The effect of their evulsion was long ago stated by Bernard to be paralysis of the larynx, in reference to its phonetic attributes only, but Heidenhain agrees with Schiff in thinking that the paralysing influence is exerted upon the respiratory functions of the larynx as well as upon those connected with the voice. Thus one of the earlier consequences of paralysis of the larynx is, not unfrequently, death by the entrance of food into the air-passages. If the animal survives the operation for some time, it often dies from pulmonary inflammation, also occasioned by the entrance of particles of the food into the bronchi, whilst in other instances pleurisy or pericarditis supervenes.

The frequency and rhythm of the respiratory acts is unaltered

after the evulsion of the accessory nerves, nor do the movements of the stomach and alimentary canal seem to be in any way interfered with, provided that a branch to the œsophagus given off from the pneumogastric very high up, is not damaged.

Heidenhain holds that the inhibitory nerves of the heart contained in the trunk of the pneumogastrics primarily originate in the accessory nerves, since he has found that a few days after evulsion of the accessory nerves from the jugular foramen, the excitation of the pneumogastric nerve is not followed by its wonted inhibitory effect. He has observed, also, that evulsion of the accessory nerves is constantly followed by increased frequency in the beats of the heart, unless only in those cases where the rapidity of the heart's action before the operation was very considerable. The deep origin of the inhibitory nerves existing in the trunk of the spinal accessory nerve appears to be from the medulla oblongata, and not from the spinal cord. In opposition to the results obtained by Schiff, Heidenhain finds that section of the pneumogastric nerves, after previous evulsion of the spinal accessory nerves, is constantly followed by a diminution in the frequency of the beats of the heart, which he attributes to the derangement of the respiratory mechanism consequent on the former lesion. On the whole, therefore, he concludes that the inhibitory nerves of the heat contained in the vagus, originally proceed from the nervus accessorius Willisii, for, on the one hand, the stoppage of the heart's action, induced by excitation of the pneumogastric, is dependent on the integrity of the accessory fibres, and, on the other hand, evulsion of the accessorius is followed by increased frequency of the pulse, and if the pneumogastrics are afterwards divided, the frequency of the heart's beats may be diminished in consequence of embarrassment of the respiratory mechanism. If, under normal circumstances, the vagi of an animal are divided, this lesion operates in two opposite directions upon the rapidity of the heart's action ; for the division of the accessory fibres contained in the pneumogastric trunk occasions an acceleration, whilst the division of the proper vagal fibres induces a retardation of the cardiac beats ; and usually, as is well-known, the former influence preponderates—the pulse rising in frequency.—*Heidenhain's Studien des Physiolog. Instituts zu Breslau*, 1865, p. 109.

CRITICAL AND EXPERIMENTAL INVESTIGATIONS ON THE THEORY OF THE INHIBITORY NERVES.

By Dr. E. F. M. PFLUGER.

Pfluger commences his paper by observing, that all the facts which Schiff and Moleschott believe they have established against Pfluger's doctrine of the inhibitory influence of the vagus upon the heart are illusory. Schiff, it is well-known, considers that by extremely feeble stimulation of the vagus the frequency of the beats of the heart may be increased, but that if the exciting electrical force be increased, even to a very moderate amount, the vagus becomes exhausted, and is no longer capable of transmitting the normal motor energy to the heart. Schiff acknowledges the variation of frequency under gentle stimulation to be very slight, indeed scarcely more than occurs under ordinary circumstances, without stimulation. Now, in reply to these statements, Pfluger first adduces a series of experiments, in which he shows that with extremely feeble currents applied to the vagus of the frog either no variation takes place in the heart's frequency or the number of beats is absolutely diminished.

Again, Schiff maintains that—1. It is the accessorius whose stimulation really induces the stoppage of the heart's action when a current of moderate force is applied to the vagus. 2. That paralysis of the accessorius causes no increase in the number of the beats of the heart. But that—3. The division of the vagus in the neck occasions the increased frequency of the pulse, as has been so often observed. Pfluger remarks on this, that the very recent experiments by Heidenhain (above recorded) have shown that the tearing out of the accessorius occasions an increase in the frequency of the pulse, whilst, according to Schiff, paralysis of the accessorius has no influence on the heart. Heidenhain has also shown that after tearing out the accessorius, at which time irritation of the trunk of the vagus occasions no increase of the heart's beats, section of the vagi does not, as Schiff contends, produce an acceleration, but a *diminution* in the number of the beats. Heidenhain explains this by supposing that an indirect influence is exerted upon the heart through the deficient play of the lungs, but Pfluger thinks it reasonable to suppose that when the accessorius was torn out the vagus also suffered. He then enters into a critical examination of Moleschott's experiments, in which electrical, chemical, and mechanical stimuli were applied, and points out various sources of error.

Moleschott's conclusions from his experiments were—

"1. That weak excitation of the sympathetic causes increased frequency of the pulse. 2. That this effect is not of a reflex character. 3. That strong electrical stimulation applied to the sympathetic can bring the heart to rest."

Of these propositions Pfluger considers the first two to be insufficiently proved, and the last to be absolutely erroneous. The conclusions at which Pfluger has arrived after repeating and variously modifying his former experiments, are, that the very first effect which weak currents of electricity transmitted through the vagus nerves effect, is a prolongation of the *diastole* of the heart, and that, under no circumstances, is the rapidity of the heart's action primarily increased by such stimulation, whether the electrical stimulus be strong or weak. He has also investigated again the action of the splanchnic nerves, when irritated, on the peristaltic movements of the intestines, and does not hesitate to pronounce as erroneous the statement of Schiff that it increases their rapidity and energy. He regards them as being essentially the motor nerves of the arteries distributed to the intestines.—*Untersuchungen aus dem Physiolog. Institut zu Bonn, herausgegeben von Dr. Pfluger.*

Reviews.

ON DISEASES OF THE RESPIRATORY PASSAGES AND LUNGS. By Walter Goodyer Barker, M.D. London: John Churchill and Sons.

The chief object of this treatise is to bring into prominent relief the effects of atmospheric vicissitudes in the production of disease. The author seems to think that the subject has not yet received so much attention as it deserves, and having made a special study of *medico-meteorology* for upwards of fifteen years, is entitled to be heard.

For this reason we could almost wish he had resisted the temptation of describing the symptoms, course, and treatment of the diseases of the air passages, and confined himself to the development of his ideas on their causes, not that we complain of the manner in which the descriptions are given, but that they almost necessarily distract the reader's mind from the proper theme of the work, and so tend to throw into the shade the points which the author is most anxious to make prominent. It is, however, a temptation which perhaps few writers would be able to resist. Our notice will be mostly confined to Dr. Barker's propositions in reference to *causes*, which furnish him with the following classification of diseases of the respiratory organs:—

1.—Those which owe their origin to the immediate contact of the atmosphere upon the diseased part. Under this head he treats of coryza, catarrh, laryngitis, tracheitis, bronchitis, and pneumonia.

2.—That produced by the application of cold to the surface of the chest—viz., pleurisy.

3.—Epidemics. These are, according to our author, influenza, hooping cough, and measles.

4.—That which arises from constitutional causes, hereditary or acquired—viz., phthisis.

It is, however, admitted that this division is somowhat arbitrary, inasmuch as we can scarcely maintain that any one of these diseases is constantly produced by either cause singly.

The whole book is eminently practical, and many valuable remarks are scattered throughout, showing the author to be an observant physician; so that, in spite of the one defect we have named, and some rather involved sentences which occasionally obscure the meaning, but may easily be removed in a future edition, we have found it very readable. It might be anticipated that an author who looked upon diseases of the respiratory passages from this point of view would have much to say of weather and climate, and such is in fact the case. Dr. Barker has long been physician to the Worthing Infirmary, and has a good deal to say in favour of the winter climate of the whole South Coast of England, and particularly of that of Worthing. In reference to this, he alludes to the influence of the Gulf-stream impinging on our South and South-West coast, as pointed out by Maury in his *Physical Geography of the Sea*. No one can doubt that to this is, to some extent, due the climate of our home winter resorts, which Dr. Barker contrasts

rather favourably with those of the Mediterranean. Having suffered many years from preternatural sensibility of his own air-passages and found relief at Worthing, and his own father, in spite of bronchial disease and tendency to bronchitis, having survived to the age of eighty-one in comparative comfort, he certainly has a right to speak well of the town.

Its climate is doubtless much less stimulant than that of a large number of fashionable foreign resorts, and deserves attention in a class of cases in which we have reason to dread too directly stimulating an effect. One or two of the cases in which its influence is described were undoubtedly striking. We should, nevertheless, be glad to obtain a more exact definition of the cases in which it is most appropriate. In asthma we have little faith in our own coast, and are almost inclined to subscribe to the doctrine that is gaining ground, that London is about the best winter home for asthmatics. The sad failures of all climates in confirmed phthisis are very discouraging. Where a very powerful stimulant is needed we look to the Mediterranean, or to a still greater distance. For direct sedative influence we should turn to the Pyrennees. But for a *medium*, away from our own few places, where can we turn except to Rome—unless, indeed, San Remo on the Riviera shall be able to establish the claim that has been put forth on its behalf?

Then, again, there are a large number of cases in which change of climate may be desirable, but in which it is almost dangerous to attempt it, lest we do too much. We should be glad to hear Dr. Barker's experience of the effect of the climate of Worthing on those diseased states following epidemics, and especially in the remains of consolidated lungs coming on in the course of measles. If he could show that Worthing would aid the repair of such a condition he would confer a real benefit on a large number of sufferers, and secure for the town a prosperity equal to that of any winter resort at home or abroad. Space forbids further discussion of this interesting topic, and we have only to add that the same inexorable fact prevents our entering upon several others we had intended to mention in our notice of this interesting little volume.

A PRACTICAL TREATISE ON APOPLEXY (CEREBRAL HÆMORRHAGE): its Pathology, Diagnosis, Therapeutics, and Prophylaxis; with an Essay on (so-called) Nervous Apoplexy, on Congestion of the Brain and Serous Effusion. By William Boyd Mushet, M.B.Lond., M.R.C.P.L. Pp. 194. London: Churchill and Sons. 1866.

Under the general name of Apoplexy there is no doubt that many affections of very different pathological origin have been, and still are, erroneously comprehended. The object of Dr. Mushet in the work now before us is to extricate it as a substantive disease from an assemblage of symptoms, or, in other words, from the multiform phases of coma. In fact, he restricts the term apoplexy to those cases where there is hæmorrhage within the cranial cavity, and he endeavours to point out the symptoms indicating this lesion, and the treatment to be adopted in obviating its consequences. Excluding, therefore, such cases as uræmia, and narcotic poisoning and drunkenness, and regarding the disease as due to an extravasation of blood, Dr. Mushet discusses in a very able and intelligent manner the question as to the reasons why apoplectic effusions should occur, and the conditions necessary for bringing about such a result. The two views generally entertained as to the cause of apoplexy are—first, that it is caused by hypertrophy of the heart; and secondly, that it is due to degenerative disease of the cerebral arteries, the former opinion being advocated by Dr. Burrows, and the latter being generally adopted by modern pathologists. But while Dr. Mushet's researches appear to confirm the impression that some enlargement of the heart is a very constant accompaniment of apoplectic seizures, he by no means believes that these two circumstances are necessarily to be regarded as cause and effect, because another factor is indispensable to the result—namely, the degeneration of the arteries. He very justly observes, that out of the numerous cases of enlarged heart, to be found among the applicants for medical relief at hospitals and dispensaries, only comparatively a few are seized with apoplexy, while on the other hand he maintains that the natural degeneration of the arterial coats is not followed by apoplexy, unless there be also an enlargement of the cardiac walls. It is in the latter assumption that the chief novelty of Dr. Mushet's opinions consists; and he has brought forward a number of cases in which the weight of the heart was accurately taken, in proof of his position. It may be mentioned that a great portion of Dr. Mushet's experience was drawn from the practice of the Marylebone Infirmary, of which he was for some years the resident medical officer, and where there exists a wide field for pathological research. The treatment of apoplexy is described at considerable length, and the arguments for and against the use of the lancet are very fairly adduced, and probably the general opinion of the profession will coincide with that of Dr. Mushet, who thinks bleeding justifiable in robust persons, when the symptoms are comatose more than syncopal, the lethargy profound, and paralysis present. We consider this treatise to be at once philosophical and practical, and worthy of the attention of the profession.

ELEMENTS OF CHEMISTRY: THEORETICAL AND PRACTICAL. By William Allen Miller, M.D., LL.D., Professor of Chemistry in King's College, London. Third Edition, with additions. Part III. Organic Chemistry. Pp. 1014. London: Longmans. 1867.

This bulky and most comprehensive volume, which is complete in itself, and may be obtained separately from its two predecessors, is a most able and learned summary of the present state of Organic Chemistry. What this branch of chemical science was thirty years ago is well-remembered by many of the present generation; what it may become thirty years hence it is imposible to conjecture, so numerous are the ramifications it presents, so extensive are its connections with the study of animal and vegetable life, and with the operations of commerce and of art. Every day new and hitherto unsuspected analogies are discovered, binding together some apparently disconnected facts brought to light by separate and laborious observers; every day some new discovery in the practical applications of chemistry adds to the comfort, the welfare, or the enjoyment of mankind. In the department of organic chemistry, in particular, the operations of life, in its ever varying conditions, are traced in all their subtle changes, and the products of organization are found to be amenable to the same molecular transformations as those which are traced in the brute matter constituting the earth, the waters, and the air. Whether the present very ingenious theories of organic chemistry will hold their ground, or whether they will be succeeded by others equally ingenious but, perhaps, more simple, time alone will determine; but "sufficient unto the day is the evil thereof," and the student of 1867 must master, as best he may, the complicated formulæ now presented to his acceptance, although he may regard the existing aspect of chemical philosophy like the shifting colours and angles of a kaleidoscope, which a new development of facts or theories may presently arrange in some new and fantastic combinations.

The most important changes made in the present edition of Dr. Miller's now well-known "Elements of Chemistry" consist, as the author tells us in the preface, in the adoption of the new form of notation, employed originally by M. Gerhardt, and now adopted by many distinguished chemists both in this country and on the Continent. It has lately been prominently advocated by Professor Williamson, of University College, London, and it is adopted at the University of Cambridge, and the publication of Dr. Miller's new edition will probably render it still more widely known. The columns of a medical journal are not the appropriate locality for a discussion of the merits of the new as compared with the old notation, and we, therefore, abstain from making any commentary upon the undoubted difficulties, both in theory and in practice, which will necessarily attend the attempt at a general introduction of the new system; but we may state with perfect truth that those who wish to study the whole subject under the novel phase which it presents in consequence of the recent changes in nomenclature and notation, will find ample information on every point in Dr. Miller's pages. They form, indeed, the best text-book now existing on the whole subject of chemistry, gigantic as the proportions of that science have now become.

THE BRITISH ASSOCIATION FOR THE ADVANCEMENT OF SCIENCE. Nottingham Meeting, August, 1866. Report of the Papers, Discussions, and General Proceedings. Edited by Wm. Tindal Robertson, Esq., M.D. Nottingham: Thomas Forman. 8vo. 1866.

It would be impossible for us to give anything like an abstract of this volume, which has been ably edited by Dr. Robertson, and which contains much that is interesting and important to our profession. The attempt to single out any papers for special remark would prove of no use, for in truth there is little

in the volume that is not of interest to the special class for which it is intended. The sections on Chemical Science and on Biology will prove worth reading to many of the subscribers to this journal.

A PRACTICAL TREATISE ON RUPTURE: its Causes, Management, and Cure, and the various Mechanical Contrivances Employed for its Relief. By T. P. Salt. [2nd Edition.] 8vo. Churchill, London. 1865.

This is a second edition of Mr. Salt's well-known treatise on rupture, and is designed to explain the various trusses made by him in Birmingham. In The Medical Press for 14th June, 1865, we expressed our favourable opinion of some of his trusses then exposed in the Dublin International Exhibition, and we now commend his book to the profession. Mr. Salt is a mechanician, not a surgeon; he explains what rupture is, and, omitting how it should be treated, he explains the mechanism and use of various kinds of trusses employed for its cure or relief.

The Medical Press and Circular.

"SALUS POPULI SUPREMA LEX."

WEDNESDAY, JANUARY 30, 1867.

THE *DREADNOUGHT* AND GREENWICH HOSPITALS.

The familiar spectacle witnessed by all travellers on the river Thames of the stately ship now used as a floating hospital, cannot have failed to impress the public mind with the sense of a necessity of some such institution for the reception of mariners disabled from pursuing their calling from accident or disease, and for whom no other refuge of a similar kind is at present available, for it must be recollected that sailors of all nations and coming from any ports are at once received at all hours of the day or night, and the benefits conferred on thousands of our ever-changing maritime population are thus inestimable. Not only do those who have suffered from sudden illness or the effects of accidents receive prompt and efficient succour, but the victims of long-standing disease, or the martyrs from the endemic fevers of hot climates, find in this home a welcome shelter from the troubles and inconveniences of a long sea-voyage, and a careful administration of the medicines and diet suggested by the sagacity of modern medical science.

It is universally admitted that the managers of the Seamen's Hospital Society have honestly and conscientiously administered the funds entrusted to their care, and that the general arrangements are not only free from censure but are the subjects of public admiration. It is, therefore, quite unnecessary to defend the institution, as no charges have been brought against it, and its utility is unquestionable; but it is the more extraordinary that the Government of the country has for a considerable period withdrawn from the Society the assistance which it once rendered, with the exception of allowing an old ship of war to serve the purpose of the hospital.

It appears that the *Dreadnought* Hospital was incorporated, in 1833, by an Act of Parliament, and in the first years of its existence, the nation, through Parliament, not only provided the ship, but contributed also pretty largely to its support, the yearly allowance for the first ten years being about £450 a-year, and for the next ten years upwards of £1700 a-year; but since 1854 Parliament has withheld any pecuniary aid, and the consequence, as we understand, is, that the Society has had to encounter an average yearly deficiency of about £1520.

But, independently of mere pecuniary considerations, it is now evident that the ship is no longer suitable for the purposes to which it is applied, and this objection attaches not only to the present ship, which, as to its material fabric, is in a very fair condition, but to any ship whatever. A ship is indeed a very useful structure for the purposes of an hospital when no other can be obtained, and under certain circumstances, as of war or pestilence, it is better than a stationary building, because the patients can be readily moved from one spot to another. But in time of peace, and under the present conditions of our Royal and Mercantile Marine, the reception of sick and wounded patients in a ship is on many accounts objectionable; there is, for instance, want of height between the decks, want of light for the performance of operations, too much noise to be consistent with the repose of the sick, too little ventilation for some diseases, and too much for others; and what is worse than all, the timbers of a ship, notwithstanding all the precautions of science and practical skill, absorb and retain miasmatic emanations, and thus serve to perpetuate some of the worst and most fatal forms of disease.

Now, if these inconveniences were unavoidable and irremediable, it would be useless to complain, and the balance must be struck between the advantages and the disadvantages of the institution as it stands; but it so happens that a most favourable opportunity has sprung up for removing it on shore, and for receiving the patients in a spacious structure which is now devoted to no useful purpose whatever. Greenwich Hospital, the noble fabric nearly opposite to which the *Dreadnought* Hospital Ship is moored, is now untenanted, and the natural inquiry is made, why the Government does not gracefully appropriate its empty wards for the reception of the sick mariners who are now treated on board the ship. But all the Government has consented to do is to offer to sell to the Seamen's Hospital Society, at a considerable profit, a piece of land adjoining Greenwich Hospital, and on this site the Society would be obliged to build, at an enormous outlay, a new hospital, and thus to swallow up in its erection, nearly the whole sum, from the interest of which the present expenses of the establishment are defrayed.

The objections made to the appropriation of a

part of Greenwich Hospital to the purposes of the Seamen's Hospital are of a very shallow nature, although they may perhaps be satisfactory to the official mind. The great stumbling-block is, of course, that Greenwich Hospital was intended for seamen of the Royal Navy, but then the notorious fact presents itself that the persons who were the chief parties concerned—namely, the Greenwich pensioners, as they were called, have almost unanimously declined the boon, and have left the hospital, preferring to receive the pension without the residence. They are never likely to return, and the space is therefore available for any public and useful purpose to which it may be adapted, and none certainly appears more suitable than the treatment of sick sailors, whether belonging to the Royal Navy or the Mercantile Marine. It is also urged, and with justice, that the dimensions of Greenwich Hospital are so great that only a portion of the space need be occupied by the Seamen's Hospital, and sufficient accommodation might be left to meet any future emergency.

As a mere matter, too, of pounds, shillings, and pence, it appears that the Mercantile Marine has an actual claim upon the Government, for the wages and effects of deceased seamen, to which no claim is established on the part of the relatives, were formerly paid to the *Dreadnought* Hospital, but are now paid to the Board of Trade, and the latter is therefore bound to contribute towards the maintenance of sick seamen.

DEATH OF THE PROVOST OF TRINITY COLLEGE, DUBLIN.

The Rev. Richard Macdonnell, D.D., who had filled this important office since 1852, died at the Provost's House on the 24th inst., of acute bronchitis, at the advanced age of eighty years.

Dr. Macdonnell was a Fellow of Trinity College for many years, and practised at the Irish Bar with considerable success. He subsequently took Holy Orders, both before and after which he filled various College offices up to the time of his appointment to the Provostship by Lord John Russell.

It is believed that his successor will be either the present Vice-Provost, the Rev. Dr. Lloyd, or the well-known Irish scholar and archæologist, the Rev. James Henthorn Todd, D.D., eldest brother of the late eminent London Physician, and a man whose name has been long identified with Irish literature and learning of every kind. Either appointment would be favourably received; but to Dr. Todd the Medical School of the University of Dublin owes much of its present prestige, and therefore we would gladly see him in the Provost's seat. Dr. Todd's father, Charles Hawkes Todd, was an eminent surgeon, and was President of the Royal College of Surgeons in Ireland.

HONOURS TO SANATORIANS.

The Metropolitan Medical Officers of Health have acquired fresh honour in the election of Mr. Simon, Medical Officer of the Privy Council, to the Presidency of the Pathological Society of London. The selection is such as to add to the honourable position of the Society, and at the same time do credit to a body of the Profession, whose services to the public have proved most valuable. Mr. Simon is worthily selected as the representative of such men as Dr. Druitt, Mr. Barnard Holt, and Drs. Pavy and Sanderson, the Professors of Physiology at Guy's and Middlesex Hospitals.

NAVAL ASSISTANT SURGEONS.

Our readers are tolerably well aware of the attempt of the Admiralty to decoy medical students into the Naval Medical Service, by a process of serfdom hitherto unknown in the history of our Profession. We refer to the proposal of my lords to pay a sum of money to medical students of a certain standing, they agreeing to become Naval Assistant Surgeons, and binding themselves to serve as such for a term of years.

The Medical Department of the Navy must be essentially rotten when such a proposal as this could be for a moment entertained by the authorities; but what concerns us chiefly is, that our Profession should be so esteemed by my lords as it manifestly is, when such a degrading offer could for a moment be made. For this offer is, in effect, tantamount to saying:—"We will not give the Naval Assistant Surgeons what is fair, but we will undersell the Medical Profession by getting in a lot of students who will do our business well enough, and who, from their exigencies, will gladly take our bounty money, and enlist as private soldiers and seamen do."

In London the medical students have held an indignation meeting, and scouted the proposals of the Admiralty. By all means let the Dublin students do the same; and let it not be said, to the reproach of the Dublin Schools, that they will be found to supply this class of officers to her Majesty's Navy. If a man wish to be a private soldier or seaman, let him; but if he desire to be a commissioned officer let him never accept a commission on any but honourable terms, and on a footing of perfect equality, in that respect, with all other commissioned officers in the land and sea forces of our Sovereign Lady the Queen.

THE WEATHER AND THE PUBLIC HEALTH.

The effect of the severe frost already tells its tale in the mortality returns. The full effect, indeed, is not yet recorded since the report for the last week (to appear this afternoon), cannot fail to display a further increase in the

deaths, from this cause. Three weekly returns have, however, already been issued during the present year. During the fortnight ending January 19th, the deaths in London were 3605, whereas in the previous fortnight, ending January 5th, there were 2873 deaths in London. This shows an excess of 732 deaths in two weeks, the whole of which may be considered as due to the severity of the weather. The deaths through the calamity in Regent's Park have not yet been returned by the coroner, and are, consequently, not included in this return. The distribution of the excess of the deaths over the five periods of life is seen in the following figures:—Under 20 years of age, 50; from 20 to 40, 85; from 40 to 60, 186; from 60 to 80, 333; and at 80 years and upwards, 78. These figures exemplify the well-established law that the power to resist extreme cold diminishes as age advances. There were last week 312 deaths from zymotic diseases; 308 from bronchitis; 100 from pneumonia; 78 from cardiac diseases, and 189 from phthisis. We append the following details from the official returns:—

"The annual rate of mortality last week was 29 per 1000 in London, 31 in Edinburgh, and 31 in Dublin; 38 in Liverpool, 38 in Manchester, 29 in Salford, 29 in Birmingham, 28 in Leeds, 27 in Sheffield, 29 in Bristol, 42 in Newcastle-upon-Tyne, 28 in Hull, and 35 in Glasgow. The rate in Vienna was 33 per 1000 during the week ending the 12th inst., when the temperature was 10·9 deg. Fahrenheit lower than in the same week in London, where the rate was 32 per 1000.

"At the Royal Observatory, Greenwich, the mean height of the barometer in the week was 29·586 in. The barometrical reading decreased from 29·79 in. on Monday, to 29·32 on Thursday. The mean temperature of the air in the week was 26 deg., which is 10·5 deg. below the average of the same week in 50 years (as determined by Mr. Glashier). The entire range of temperature in the week was 21 deg. The mean of the highest temperatures of the water of the Thames was 32·7 deg.; that of the lowest was 31·2 deg. The difference between the mean dew-point temperature and air temperature was 6·1 deg. The mean degree of humidity of the air was 76, complete saturation being represented by 100. The direction of the wind was variable. Snow fell on Wednesday, Thursday, Friday, and Saturday. At Manchester and Eccles the lowest temperatures on Sunday were 12 deg. and 12·5 deg., on Monday 11 deg. and 12 deg., and on Tuesday 9 and 8·7 deg. respectively. At Wakefield on Sunday the lowest temperature was 14 deg. According to a return furnished by the engineer of the Metropolitan Board of Works, the average daily quantity of sewage pumped into the river Thames at the southern outfall works, Crossness, in the week ending the 19th of January, was 48,950,585 gallons, or 222,405 cubic metres, weighing about as many tons. In the week ending the 12th of January, 293,759 cubic metres were pumped daily."

Notes on Current Topics.

Destitution in London.—After pestilence the famine. Such has long been the course of events, and now a state of destitution bordering on famine is to be witnessed in those parts of the metropolis lately ravaged by cholera. It was estimated that on the last day of the frost at least 22,000 working men had become dependent on the parishes, while immense numbers were seeking relief. From every point the cry for help had gone forth, and the charitable public has been constantly besieged for subscriptions. Besides all this, every street in London witnessed bands of workmen patrolling and singing "All froze out," as a means of extracting a few pence. We consider that such a state of affairs shows a miserable break-down in the administration of our Poor-law. No man ought to have to beg or starve. The very object of our law is to preserve every one from starvation, and when it fails in this, reform is imperatively demanded. Let the noble stream of British charity ever flow as freely as now; but it ought not to be called upon to serve as a substitute for an inefficient but expensive legal machinery. The existing destitution is no doubt complicated by the strikes. It appears that the London shipwrights have declined 6s. 6d. per day. For these men we have no pity. When their trades'-union funds are exhausted, the workhouse test is their only resort; but unfortunately there are many other labourers dependent upon these, and who are deprived of work by the obstinate combination of the shipwrights. While, therefore, we withold all sympathy from men "on strike," our fullest pity cannot be withheld from those dependent on them. For these, and their wives and little ones, timely aid is needed, and we are glad to find the Mansion-house Committee that did such good service in the cholera has been reconstituted for this purpose. No better method of meeting a sudden emergency has been devised, and we consider the money thus distributed of more real service than indiscriminate alms-giving to those who make great outcry, but are probably less deserving than the majority reached through this agency.

Prospects of the Session.—Among the many rumours of the coming Parliamentary Session are some of interest to the profession. Thus it is confidently asserted that the President of the Poor-law Board is ready to introduce a measure for the improvement of workhouse infirmaries, and the better treatment of casuals. It is not improbable, if the question of Parliamentary reform should be postponed, which some Conservative organs seem to hope may be the case, that sanitary matters of considerable importance will be brought forward. It would be a satisfaction to the profession to be informed whether the Medical Council is prepared to seize any opportunity to press on the Legislature the necessity of amending the Medical Act. It is useless to allude to other subjects the Council might well take up. This and the Pharmacopœia will assuredly more than overburden this dignified and slow-moving body.

Snowed Up in a Train.—The recent inclement season has brought into greater prominence than ever the carelessness of English railway officials for the comfort of their passengers. Trains have been brought to a standstill by deeply-drifted snow. Travellers have on these occasions been detained many hours—in one instance a whole night—with no protection from the pitiless storms of winter but such as is afforded by the cold, comfortless carriages into which the English public consents to be packed; and this with the thermometer many degrees below the freezing point. Not that we hold directors responsible for the season, the unusual severity of which is attested by the same calamity having befallen trains on the lines of Southern France, but this fact affords a forcible illustration of the long suffering of Englishmen, in spite of their character for grumbling, and their reputed devotion to comfort. French railway carriages—even on lines traversing districts to which thousands of our countrymen annually resort to escape the rigors of an English winter — are always warmed. The floor of each compartment is occupied by coppers or tins filled with hot water, and

covered by carpet. Sometimes we have found them keep the carriage too warm, and accordingly had them removed; but in the cooler months what a comfort they have proved! We have travelled twelve and eighteen hours together without suffering from the cold. Now, why is not the same plan adopted on our railways—at least in the winter? What would not those unhappy ladies who were recently snowed up for a whole night in the "limited mail" have given for such a luxury? By it and a good thick rug they might easily have been protected from the worst consequences of their misfortune. Every engine carries with it an abundant supply of hot water. The price of the foot-warmers could not be very great. We commend the idea to our railway directors, sincerely wishing those who refuse to try the plan may shortly have to pass a night snowed up in a train.

Reappearance of Cholera.—Under this title some alarming accounts of an alleged new outbreak in the North have appeared. The village of Coxhoe in Durham is the scene of this epidemic, which would appear to have broken out with great virulence one Sunday night; above fifty cases of diarrhœa and cholera having occurred before nine A.M. the next morning. After this forty more cases of diarrhœa and twenty-five of cholera occurred in the week, out of which number twenty-six deaths took place. This, in a population of 1500, is certainly very unusual, and would seem to point to the absorption of poison, rather than to epidemic influence. Yesterday week ten more cases of cholera, of which five proved fatal were reported, besides twenty-three cases of diarrhœa. The circumstances call for a strict enquiry, and although every effort is said to be made to stay the plague, we are not sufficiently aware to how great an extent the narrow stream in front of the pitmen's cottages has been used for domestic purposes.

Filthy Quack Pamphlets.—There is one particularly offensive kind of quackery deserving more rough treatment than any other. We allude to that which preys upon ignorant young men by placing in their hands descriptions suggestive to the youthful imagination of the very evils they pretend to deplore. The scoundrels who flourish in this manner used to post their filthy advertisements in the public urinals, but some of them are growing bolder and venturing into the streets, with offers of their pamphlets. It has lately become difficult to walk along Piccadilly, Regent-street, and some other thoroughfares without having one of these productions thrust into one's hands. During the last few days we have had the pleasure of committing a number to the flames. Were all the world to follow this example the trade would soon cease to pay and so an end be put to this social nuisance. Unfortunately, human nature is weak, and in youth especially so. Consequently the trash is read and believed, the quack is sought as the only salvation, and the victims ruined in morals as well as in purse. We recently saw a youth of thirteen in a railway carriage deeply engaged in attempting to understand one of these treatises on "Manly Vigour." The writer began with taking his Maker's name in vain, and went on to declare that the virtues of a certain remedy had been proclaimed by every academy and college at home and abroad, concluding, of course, with the address where the said remedy was to be procured. Such productions as these could never be circulated through respectable publishers or booksellers. They are given away at the corners of streets. We trust that no reputable drug vendor would sell the nostrum. But is there no method of putting down this unrecognized trade? We have heard of Lord Campbell's act, forbidding the exhibition of obscene pictures and books. Would it not be possible to apply its penalties to those who distribute to our youths in the public streets such indecent printed matter as we have alluded to?

The Poor Relief in St. Pancras.—A very proper remonstrance has been made against the method of administering relief in this parish. It would appear that on only one day in the week, and at only one place in this enormous parish, can the relief be obtained. The consequence is, that old people often have to be days without food unless some be obtained from private charity. On the other hand, many have to walk long distances in order to obtain it. Until recently, it is stated that the business was got over by about one o'clock; but in consequence of recent pressure, poor people have been kept in these bitter cold days waiting from eleven A.M. to five P.M. At a meeting of the Board of Guardians last Wednesday, a resolution was passed requesting the vestry clerk "to make proper arrangements." Unless this be immediately done, we hope the Poor-law Board will not hesitate to interfere. The present state of most of the Metropolitan Parishes must be reformed.

The London Surgical Home and the Commissioners in Lunacy.—We have recently drawn attention to the manner in which the Lunacy Commissioners watch over every infringement of the laws. Their vigilance is again exemplified in a correspondence that appeared in the *Times* on Thursday. A paragraph respecting the "Home" was inserted in the *Times* on the 15th ult., in which the writer spoke of that institution as designed to relieve certain mental maladies. This at once brought the Commissioners in Lunacy down upon the officers of the Home, with a demand for explanations, and eventually an appeal to Mr. Baker Brown himself, as the Senior Surgeon and Founder of the Institution, to disclaim any intention of making it an Asylum for Lunatics. Mr. Brown has of course very properly replied to this effect. It is easy to understand how a writer in a general newspaper might confound hysteria with mental alienation. The circumstance, however, shows very clearly the vigilance of the Commissioners in Lunacy, and can therefore scarcely be regretted. The correspondence will be found in another column.

Medical Men.—The daily press is teeming with laudations of the conduct of those medical men, whose humane exertions during the recent calamity in Regent's-park were in so many instances the means of snatching from the jaws of death, those whom, to a casual observer, had apparently succumbed to the watery element into which a hundred had been so suddenly immersed. The press generally is only too pleased to seize an opportunity for promulgating reports of the apparent neglect of duty of a medical officer, and we welcome these expressions of esteem, for a few of its members, as being but types of the whole profession, which, except in very rare instances, has never been found wanting in sympathy, or any of those attributes which commend themselves to all thinking men. The medical profession is indeed a noble institution; look at the hundreds who sacrifice time, and but too often their lives, in trying to ammeliorate the troubles, and assuage the sufferings of their fellow-creatures on the battle-

field, in hospitals, amongst fever dens, and in the most trying scenes human eye can witness. Yes, and in the majority of cases without any reward but the inward satisfaction of having done their duty. We say that we welcome these expressions of the press in general, because latterly there has been a tendency, especially in one or two of uneviable notoriety, to come out with flaming leaders, and with abuse, no journal claiming to be called respectable should stoop to use, denouncing medical men as if they were the vilest and most unfeeling of God's creatures; hence the present is a small apology, which we cheerfully accept by way of atonement for past errors of judgment.

Royal Dublin Society's Library.—A new code of rules has just been issued which virtually makes this library free to the public. As many medical men may wish to read there, we subjoin the most important of the rules, which concerns non-members :—

"20. Admission may also be obtained upon application to the Library Committee, *accompanied by such recommendation as they shall deem satisfactory*. This application must be in a form provided for the purpose; it must be filled in the applicant's handwriting, and specifying the names in full, age, place of abode, and profession or occupation of the applicant. The recommendation *must be founded on personal knowledge of the applicant, and certify his or her intention and ability to make proper use of the Reading Room.*

"N.B.—*Printed forms of application may be obtained from the Hall Porter.*"

SYMPTOMS AND TREATMENT OF HÆMORRHŒA SEROSA.

By Dr. LENEY.

HÆMORRHŒA CONTAGIOSA.

In this very contagious outbreak of hæmorrhœa which prevails in this country immediately now, vertigo is rare, as also restlessness and jactitation; oppression of chest is not complained of, neither have we the total loss of muscular power or extreme collapse of countenance with terror. In very rare cases does the whole body assume the blue discoloration, lividity shows itself alone in the face and extremities. The algid stage not so profound. The extremities are not shrunk, nor the skin so deadly cold—nay, in many cases the temperature of the body is but little altered. The tongue moist, of ordinary size, and rarely cold. In the epidemic disease, when asphyxia was complete, the patient lived but a very few hours; not so in this contagious form, asphyxia very soon sets in, and it is perfectly marvellous how long the patient will survive in total pulselessness—viz., from one to five and six days, vomiting and purging are not to the same amount, nor the fluid ejected with such force. In the epidemic hæmorrhœa the evacuations were acholic from first to last; early in this form bile is mixed in the dejections, and in many cases I detected a tinge of bile throughout the attack.

A woman, aged 40 years, being four days pulseless, during which time she had constant sero-albuminous vomiting, purging, and cramps, she now remained for three days in a very collapsed and unsatisfactory condition, when suddenly violent bilious *cholera* set in; for twenty-four hours she threw up basin upon basin of pure bile, and suffered from severe cramps of the calves of her legs, from this she recovered under large doses of calomel and opium. The cramps in this form are trifling in comparison. The voice not raucous, but clear and weak; respiration easy, not laboured, spasmodic and struggling; on the contrary, breathing is barely perceptible to the bystander, and very audible and clear on auscultation. The vox cholerica rarely well-marked. Leiperia not distressing; thirst not so urgent; sense of touch not much diminished; hearing but little impaired. In the epidemic form the eyes sunk deep in their sockets and dark; vision, if any, very imperfect. Not so in this, but the eyes suffused, and conveying the impress of exhaustion, as that of a person suffering from combined fatigue, hunger, and want of sleep. The integuments of the abdomen are not drawn to the spine, absolutely resting on the vertebra; no, but on the contrary, and a *most important feature*, the *stomach* and *abdomen* are *full, doughy*, and *distended*. I lay emphasis on this condition, for in the epidemic disease in those cases in which the secretion was retained, no evacuations taking place from stomach or bowels, they proved the most suddenly fatal; and on post-mortem examination both stomach and bowels were found distended with sero-albuminous fluid to bursting. In this outbreak we do not, on visiting a patient, perceive the faint and sickly choleraic odour from the body and evacuations; the cabin may stink, to be sure, but the effluvium of hæmorrhœa causing immediate nausea, followed by anorexia, is absent. Anuria is an early symptom; question the patient, and he tells you he made, for some time, little or no urine. Possibly, on strict investigation, it will be found that anuria precedes emesis or diarrhœa; however, from the onset, secretion of urine is *nil*, and almost alone on the restoration of the secretion of urine, more especially in children, can we have hope. The majority of the patients pass off comatose without pain or struggle; but with children frequently convulsions precede death owing to uræmia.

In this form also the usual time of seizure is between one o'clock and five o'clock A.M.

Relapses are common in this form, not so in the epidemic.

TREATMENT.

In 1832 the eliminative treatment was adopted, and was partially successful; then the treatment consisted in giving a mustard emetic, followed by a dose of castor oil.

From my experience of this outbreak, I look on the eliminative treatment as that in which confidence should be placed; but to be successful it must fulfil two important intentions—first, that of emptying the stomach and bowels of the accumulated poisoned sero-albuminous fluid, and, at the same time, constringe the patulous vessels of the mucous membrane, so as to forbid any further extravasation. These intentions are fulfilled by the following combinations. Give first the following emetic :—

℞ Sulphatis zinci, ℈ j.
Pulv. sinapis, ʒij., vel. ʒss.
Aquæ tepidæ, ʒviij. ℿ.

This not only unloads the stomach, but the zinc acts as an immediate styptic on the mucous membrane, also allays cramp of stomach and bowels.

In several instances have I given the above emetic; no vomiting consequent on it, but cessation of vomiting, and strange, though the patient had been vomiting up to the moment of taking it, yet retained it, seems to act equally well.

As soon after as may be, give the following draught :—

℞ Olei ricini.
— terebinthinæ, aa ʒss.
Tinct. capsici, gtt. xx.,
Aquæ cinuam, ʒj. ℿ. ft. haustus.

This unloads the bowels of the fluid contained in them, and we have no more powerful anti-hæmorrhagic styptic than turpentine. In some cases of adults I continue this treatment throughout, but especially in children have I found it successful.

The mucous membrane being now laid bare to absorption, I shall illustrate by a case the most reliable form of treatment :—

A man, aged 58 years, a most hopeless looking case, indeed on my visit I pronounced him moribund. However, as above treated on the eliminative plan laid down, vomiting, purging,

and cramps, ceased ; mucous membrane laid bare to absorption, but pulseless, and no secretion of bile or urine. I gave him the following :—

℞ Calomel, gr. ij.
Capsici, gr. iij. ℳ. ft. pil.
Camphoræ, gr. j.

One such every hour until griping set in, which took place after the sixth pill (he complained bitterly of the griping), but now his pulse was legible for the first time for two days ; his voice good and countenance also, if such can be said of a naturally very ugly fellow. I then gave him a dose of castor oil and turpentine, large bilious motions with abundant secretion of urine followed ; he at once recovered, and in three days resumed labour. Immediately on seeing my patient I adopt counter-irritation, apply at once to pit of stomach acetum lyttæ, also over the kidneys, or, what suits better, one quart of bran in a flannel bag twelve inches by twelve, dipped in boiling water, then strongly wrung out ; sprinkle one surface with half a pint of spirit of turpentine, place this over the kidneys and loins, bind it firmly on with a flannel roller and let it fully irritate the skin.

Much advantage will be derived from the inhalation of dilute oxygen gas, or the burning of touch-paper made from a solution of nitre, to which nitric acid is added.

Turpentine epithem to the whole spinal column, chest, and abdomen, also to the extremities, until heat and redness succeed. As drink, iced water, lemonade, soda-water, butter-milk, and good cider.

Give chicken-broth, arrow-root in milk, or boiled bread and milk.

Should cramp of stomach be much complained of, an enema of half an ounce of æther and thirty-five drops of laudanum in half a pint of gruel.

On convalescence give the following :—

℞ Sulphatis quinæ, ℈ij.
Pulv. alumenis, ℥j.
Acidi sulphurici dil.
Tinct. capsici, aa ℥j.
Aquæ ad ℥x. ℳ.

Capt. ℥j. bis terve in die.

If the primary symptom be nausea and anorexia give a stimulant emetic ; if diarrhœa, the following pills :—

℞ Opii pulv. gr. iij.
Acet. plumbi, gr. xij.
Capsici.
Camphoræ, aa. gr. iv.

Mannæ qs. ut ft. pil octo. capt. j., 2nd. hora.

CHILDREN.

This disease has prevailed much with children from infancy to the age of twelve years, and has been extremely fatal amongst them ; very many go through the primary symptoms, then linger on for days, and perish of uræmia and convulsions consequent on uræmia.

In children I adopt the same plan of treatment ; many I have succeeded with in giving the castor oil and turpentine by the mouth every second or third hour, and enemas of alum in cold water, blisters to pit of stomach early. In children this is very important as they suffer much pain there.

The abdomen freed I give occasionally :—

℞ Ol. juniperi, gtt. xvi.
Spt. æther nit. ℥ij.
— terebinthinæ, ℥ij.
Mucilaginis gum arab, ad. ℥ij. ℳ.

℥i. 2nd. hora.

Also turpentine epithem to the region of the kidneys.

In some cases the abdomen freed I give one-grain doses of calomel every hour until griping or green stools appear, giving at intervals the diruetic.

MEDICAL TRIAL.

BALLARAT COUNTY COURT.

MISTAKEN DIAGNOSIS OF OVARIAN TUMOUR.

Hillas v. *R. Wynne.*

THE charges sued for consultation fees, the plaintiff having attended, with another medical man, upon the defendant's wife. In cross-examination by the defendant, the plaintiff said Mrs. Wynne had been operated upon as for a tumour, a previous puncture having been made for dropsy. The defendant said that when the operation was made for tumour the doctors were asked if the patient was pregnant, and they said she was not ; but the puncture for tumour entered the head of a perfectly-formed child, and the patient was delivered of a fœtus. The defendant added that he brought the case into court on public grounds, as the patient had been negligently treated, and at a cost of £120 to him. The plaintiff admitted that the womb should have been examined per vagina before the puncture, as the patient supposed she was pregnant, but even then abortion would have been procured. The patient was right in this instance, and the doctors wrong, as he admitted, but ordinary care and skill had been used nevertheless. The patient was at death's door when he was called in, and 2¾ gallons of water were taken from her. To his Honour—We used percussion and the stethoscope when the patient suspected pregnancy, but we could not detect it, and we supposed there was a tumour as the formation was on one side, whereas pregnancy is an enlargement in the centre of the abdomen. It was perfectly impossible that the fœtus could have been punctured, as there was fluid passed through the instrument. Defendant—I saw the puncture myself, your Honour, and so did Mrs. Edward Agar Wynne. Plaintiff—The error was not one of judgment, but one unavoidable, owing to the complication of the case, which was one in which it was almost impossible for the woman to be pregnant. She was almost suffocated by peritoneal dropsy, and when we drew off the fluid there was a lump left in the abdomen, which we inferred to be a tumour. We tapped the affair, and I still think it was an ovarian enlargement. His Honour—Still if you had been aware of her pregnacy you would not have tapped her ? Plaintiff—No ; I admit that ; but it was impossible for us to detect pregnancy. To the defendant—I was not in a "dreadful excited state," nor did I say "we have made a dreadful mistake." I deny it. Defendant—It's false, your Honour. His Honour—In this case you destroyed the child. Plaintiff—That could not be avoided in this case. A certain latitude must be allowed in all these cases. His Honour—I admit that, but what presses upon me is that the medical men ought to have tested for pregnancy. Plaintiff—Yes, your Honour ; but in this complicated case we could not well do so. In fact, we believed it was perfectly impossible for a woman so affected to conceive. To Mr. M'Cormick—We attributed the dropsy to a tumour in the ovaries. George Nicholson, surgeon, examined by Mr. M'Cormick, deposed that he attended Mrs. Wynne, and called in the plaintiff in consultation. He had himself been called in two or three years before by Dr. Hudson, the patient having aborted and being then under a dropsical affection. When witness called in the plaintiff they determined on tapping, and also on attempting to cure the cause of the dropsy—viz., a tumour. The patient had been for years the subject of ovarian disease, and what was done was done with the best intentions and from the best judgment available, the test for tumour being the usual one. There was not so much fluid as he expected, and he believed the head of the fœtus was not punctured, though in any case he thought abortion would have taken place. He was not sure it was bad practice to puncture, even if pregnancy had been recognized. To the defendant —We did not believe there was pregnancy, and I did not ask the patient as to her feelings in that respect. Mrs. Wynne was a dying woman when we took her in hand, and she has benefited very much by our treatment. I think it no loss to her that she lost her fœtus, for I think she could hardly have gone her full time. Defendant to his Honour—Mrs. Wynne has not had a child for twelve years, and has had one abortion. Witness to his Honour—I think that a puncture, even if the patient were pregnant, was not bad practice, as it was necessary to remove the cause of the disease. Plaintiff (to his Honour)—I understood the patient was ill for twelve years from dropsy. Witness—I did not hear the plaintiff admit that a mistake had been committed. James Stewart, surgeon, examined by Mr. M'Cormick, deposed that he attended Mrs.

Wynne five or six years ago for ovarian tumour, and that was the cause of dropsy in the case. He thought it good practice to try and cure the cause, but he did not try by puncture at the earlier stage, as he thought there might be adhesions. He did not treat actively then, as she was not in danger, but subsequently there was danger, and active treatment was necessary. Plaintiff to his Honour—The tumour was not grown sufficiently then. You couldn't find it then, hardly. His Honour—Surely a puncture at the earlier stage would have been as curative as at the later period? Witness—It was not possible at that time to say whether the tumour was solid or contained fluid. I certainly must say that if I had considered the patient pregnant, I would not have punctured for tumour, unless the health of the patient was such as to render it necessary. But of course a medical man is liable to mistakes, and when he has used all the skill and care he can, he is not liable for results. His Honour—But don't you think that it is the duty of a medical man to ask questions, and exhaust all the means available when pregnancy is suspected? Witness—Certainly. Dr. Nicholson had evidently made up his mind from the symptoms that the patient was not pregnant. This was the plaintiff's case. The defendant did not call any evidence, and said he relied on the neglect of the plaintiff and his acknowledged fault. His Honour, after some deliberation, said he felt great difficulty in dealing with the case, as the medical witnesses examined were gentlemen of skill. At the same time he felt that the first two witnesses had not exhausted the means of inquiry as to pregnancy, as they had not put questions to the patient on the subject particularly. No doubt the medical men felt that it was absurd in the patient to suppose she was pregnant. They pooh-poohed the patient's supposition, in fact, whereas the patient turned out to be right, and the patient ought to have been asked, as the evidence was that the feelings of pregnancy were different from those caused by a tumour or dropsy. Therefore there had been clearly an oversight in not asking the patient, and on these grounds judgment would be only for the amount paid into court. Judgment, therefore for the amount paid into court.

SECOND EXAMINATION
FOR THE
DEGREE OF BACHELOR OF MEDICINE.
OXFORD, DECEMBER, 1866.

NO. I.—PATHOLOGY.

1. What influences are supposed to favour the deposition of scrofulous material in the lung? What tissues of the organ appear to be primarily concerned therein, and what are the microscopical characteristics of this material?
2. What is meant by Leukhæmia, and what are the symptoms which are apt to arise in those affected by it?
3. Enumerate the conditions in which Sugar and Albumen may be found in the urine. What value is to be attached to their presence under various circumstances?
4. Describe the structure of the lesions of the bowels in continued fever and phthisis.
5. Distinguish histologically the several skin diseases vulgarly confounded under the title "Ring-worm."
6. Distinguish between Gout and Rheumatism, acute and chronic.
7. What arguments have been advanced to show a connection between Tubercle, Cancer and Inflammation.
8. What is meant by "Symmetrical Diseases?" Cite some instances.

NO. II.—THERAPEUTICS.

1. What would be your treatment of acute Pericarditis in the adult; and by what circumstances would your treatment of this disease be modified?
2. How would you treat a case of Scarlet Fever? What affections are wont to arise in this disease; and what means would you adopt in counteracting them?
3. What line of treatment would you adopt if called to a case of well-marked Tetanus?
4. Comment on the uses of Opium?
5. What precautions against relapse would you recommend to an artisan cured of renal dropsy?
6. What conditions favour the formation of Carbuncles? How do you treat them?
7. What circumstances contraindicate the use of Chloroform?
8. What are the uses of Digitalis?
9. What are the signs of an impacted Gall-stone? What is to be done when it is supposed that a patient is suffering from that cause?

NO. III.—FORENSIC MEDICINE AND HYGIENE.

1. What are the symptoms and treatment of (1) poisoning by Opium, and (2) poisoning by Antimony? For what other affections are these forms of poisoning most likely to be mistaken?
2. What mode of procedure would you adopt in trying to detect the presence of Arsenic or Digitalin in the contents of the Stomach?
3. In examining the person of an adult woman who had deposed to a Rape having been forcibly committed on her twelve hours before, what signs would you seek (1) of coition having occurred, so as to legally establish the felony, (2) of consent having been withheld?
4. How would you endeavour to decide whether, in a given case, Suicide is an indication of Insanity?
5. What points would you chiefly observe in trying to identify with a description of a missing person a Skeleton, of which the soft parts had been destroyed?
6. What Disinfectants are new held to be of the most value? Classify and describe their modes of action. How would you treat the clothes of a person affected with Cholera?
7. How do you detect and estimate the impurities which are most commonly found in the Air of a Sick Ward?
8. What are the principal adulterations of Bread?

NO. IV.—DISEASES OF WOMEN AND CHILDREN.—PRINCIPLES OF SURGERY.

1. From what various conditions may suppression of Menstruation arise; and how are they to be dealt with respectively?
2. What are the chief causes of Acute Mania in adult women? Describe the affection and its treatment.
3. Under what circumstances is Ovariotomy to be recommended? Describe the operation.
4. What leads you to suspect retroversion of the Uterus? How is it to be treated?
5. Enumerate the causes and modes of treatment (1) of Infantile Paralysis, (2) of Infantile Convulsions.
6. What are the symptoms of Infantile Syphils?
7. What are the points to observe in the diagnosis of Strangulated Hernia?
8. State fully the symptoms and usual history of Schirrus of the Breast. What reasons incline you to advise or dissuade operation? What treatment other than removal has been recommended?

NO. V.—CLINICAL EXAMINATION.

(a) At the Radcliffe Infirmary.

1. examine the Patients in the Out-Patients' Hall.
2. Write a Report on the cases of , Ward, and , Ward, giving with care their history, diagnosis, and prognosis, and also the treatment you would recommend. Add such general remarks as occur to you by way of clinical comment on such cases in general.
3. Examine the Urine marked A and B, Microscopically and Chemically, and write a methodical account of your plan of examination.
4. Make a Post-mortem Examination of the Body of in the Mortuary, and demonstrate the Morbid Parts.

(b) At the Museum.

5. Describe and sketch from microscopical examination the object marked B.
6. Describe the preparation marked C.

The candidates were also required to write translations from the Greek of Aretæus, and from the Latin of Morgagni.

Correspondence.

PERREVE'S STRICTURE DILATOR.

MR. BARNARD HOLT'S REPLY TO MR. RICHARDSON.

TO THE EDITOR OF THE MEDICAL PRESS AND CIRCULAR.

SIR,—A very few words will suffice in answer to Mr. Richardson's verbose, personal, and offensive letter. Mr. Richardson, so far as I am concerned, is again in error, and I can only imagine that his anger has warped his judgment. I have neither the time nor the inclination to quarrel with him, and

will therefore dismiss both him and the subject as speedily as possible.

First. Perréve's claim to priority of idea was acknowledged by me in my publication in the *Lancet.*

Secondly. Vide page 54 of my first edition—I simply claimed the credit which attached to the publication of a series of interesting cases subjected to a novel plan of *treatment.*

Thirdly. I never denied the existence of a directing-rod in Perréve's instrument, but I still maintain that this directing-rod, and the clamps on the handle, will not prevent any other than the very largest tube from being thrust beyond the blades.

Fourthly. The paragraph "In the hands of an experienced surgeon," was necessary, for even Mr. Richardson does not know that the tube in Perréve's instrument will project in spite of the directing-rod.

Fifthly. Mr. Richardson is again in error. The details of the two instruments *are* entirely different, and this Mr. Richardson's laboured statement fails to disprove.

Sixthly. I again affirm the instrument is equally efficacious *where dilatation is desired,* the sentence simply referring to the applicability of the instrument, and not to the propriety of the treatment.

Seventhly. My information respecting the abandonment of Perréve's instrument was derived from foreign surgeons who have witnessed my operations at the Westminster Hospital.

And lastly. My endeavours have been exercised to produce an instrument so simple that it can be used by *all* members of our profession; and, however much it may annoy Mr. Richardson, I am happy to have succeeded.

In conclusion, I will venture to suggest to Mr. Richardson that he must not say:

> "My will is Nature's general law,
> No force arrests my powerful hand,
> No fears my daring courage awe."—*Don Quixote.*

But if he is capable of criticism, he must exercise it in a manner devoid of personalities and offensive expressions. So long as Mr. Richardson's patients have no objection to his preference for Perréve's instrument I am sure I have not, and I apprehend that neither Mr. Macnamara nor Mr. Smyly, who have so successfully treated cases upon the plan I have propounded, will quarrel with him for so doing. It is rather late after six years to endeavour to prove the identity of the two instruments, and I fear some of your readers will conclude that Mr. Richardson is more desirous of quarrelling with his colleague than he is of defending his friend.—I am, sir, your obedient servant,

BARNARD HOLT.

MEDICAL WITNESSES AT PETTY AND QUARTER SESSIONS IN IRELAND.

TO THE EDITOR OF THE MEDICAL PRESS AND CIRCULAR.

DEAR SIR,—If you agree with me in thinking the enclosed correspondence would be interesting to your numerous readers, you will kindly give it a place in your widely-extended journal.

On the 27th September, in the afternoon, two men had an altercation—one of them drew a knife and stabbed the other in the side; same evening he was brought into my surgery by a sergeant of police, and had his wound dressed. Next day being petty sessions day, I was called upon by the presiding magistrate to give evidence, which I did. They not having authority to give any remuneration in such cases, I forwarded a statement of the case to the Chief Secretary, and after some delay I received a letter from Sir T. Larcom, stating that M. Hamilton, Esq., Crown Solicitor, had been instructed to forward me £1 1s., which he did. There was nothing here to complain of.

The case being returned for trial to the Downpatrick Quarter Sessions on the 10th of October, I attended and gave evidence, for which I received an order for £1 1s.; I objected to the fee. The Sessional Crown Solicitor's *locum tenens* said he could not give more, adding, at the same time:—"We must not squander (?) the public money!" I appealed to the Barrister, stating I never received less at quarter sessions than £2 2s. What, think you, was his rejoinder? "You got too much, perhaps!" These were his exact words. Another medical witness in a waylaying case, the same day (I am at liberty to state this, otherwise the absurdity would not be complete), received an order for £2 2s. Having come to the knowledge of this a few days after, I wrote twice to the Sessional Crown Solicitor requesting an explanation, but he did not deem it fitting to reply to either.

I then addressed the following letter to Sir T. Larcom:—

"Killyleagh, County Down, Nov., 13th, 1866.

"SIR,—Nothing but the importance of the subject—not as it concerns myself individually, but medical witnesses generally—could again induce me to trespass upon your time. The following is a brief statement of facts—namely, on the 10th of October last, I attended at Downpatrick Quarter Sessions, and gave evidence in a case of stabbing, and got an order for £1 1s. I objected, by stating to the court that in the late Sessional Crown Solicitor's time I never received a less fee than £2 2s.; he justly considering that the trouble and loss of time was all the same whether at sessions or assizes. The Barrister said he could not interfere. The same day another medical witness in a waylaying case received an order for £2 2s. Having written twice to Mr. Joshua Magee, Sessional Crown Solicitor, requesting an explanation why one should receive a fee of £2 2s., and the other only £1 1s., to neither of which did he make any reply. Under such circumstances, I am constrained to submit the case to the authorities at Dublin Castle.—I have the honour to be, sir, your obedient servant,

"R. G. SHEIL, M.D.

"Sir Thomas Larcom."

Annexed is the reply:—

"Dublin Castle, 16th Nov., 1866.

"SIR,—I am directed by the Lord Lieutenant to inform you, in reply to your letter of the 13th inst., that the following are the rules laid down by the Attorney-General (August, 1865) for the payment of medical witnesses attending quarter sessions:—'If a medical witness is summoned to sessions in the town where he resides, the usual fee of £1 1s. only is to be paid. Where he is summoned to attend at sessions away from his own residence, he should be paid £1 1s. for every day he is necessarily kept from home, beside his actual travelling expenses, and half a guinea a day for hotel expenses.'—I am, sir, your obedient servant, "THOMAS LARCOM.

"R. G. Sheil, Esq., M.D., Killyleagh."

Taking it for granted (from this) that it was now a matter of plain sailing, I enclosed the subjoined:

"Killyleagh, county Down, 19th Nov., 1866.

"SIR,—I have the honour to acknowledge the receipt of your letter of the 16th inst., No. 20,432, and beg most respectfully to thank you for the information it conveys.

"The rules therein laid down entitles me to travelling and hotel expenses over and above the £1 1s., which I received at the Quarter Sessions on the 10th of October last, the distance from my place to Downpatrick being seven miles (for which distance I am allowed 1s. per mile by the Registrar-General) and being detained there all day.—I have the honour to be, sir, your obedient servant, "R. G. SHEIL, M.D.

"Sir Thomas Larcom."

To which I received the following reply:—

"Dublin Castle, 30th Nov., 1866.

"SIR,—Referring to my letter of the 16th inst., I am directed by the Lord Lieutenant to inform you that it appears by a report from the Sessional Crown Solicitor that your claim for increased remuneration for your attendance at the Downpatrick Quarter Sessions, last October, was fully considered by the court, and was refused, and also that the case in which you were a witness was disposed of early in the day and did not necessitate your removing from home a night.

"Under these circumstances his Excellency sees no grounds for ordering further payment for your services on the occasion in question.—I am, sir, your obedient servant,

"THOMAS LARCOM.

"R. G. Sheil, Esq., M.D., Killyleagh."

I considered it a duty I owed to myself and to the profession to add, by way of justification for the course I had taken, the subjoined :—

"Killyleagh, County Down, 5th Dec. 1866.

"Sir,—I beg permission for the last time to state that both cases were disposed of in one day, and in the same hour at Downpatrick Quarter Sessions on the 10th of last October, and in neither case were the witnesses obliged to remain 'from home a night,' so that the *anomaly* complained of in my letter of November 13th still remains unexplained, and points in a striking manner to the necessity of more definite legislation on the subject.—I have the honour to be, sir, your obliged and very obedient servant, "R. G. Sheil, M.D.

"Sir Thomas Larcom."

The courtesy shown by Sir T. Larcom throughout, must be here acknowledged ; the truth is, the evils under which we labour in this particular cannot by justly saddled on the authorities at Dublin Castle, but on the uncertainty of the law (if any) on the subject.

It is admitted on all hands, that no more important evidence, whether as regards the ends of justice, or the life of a fellow being, than that of the medical witness ; why then, it may be fairly asked, are we not protected by the Crown on whose errand we are, by an adequate and definite scale of fees over which neither the Court nor Crown Solicitor should have any control.—Yours truly, R. G. Sheil, M.D.

THE LONDON SURGICAL HOME AND THE COMMISSIONERS IN LUNACY.

The following are the letters, taken from the *Times*, referred to in our "Notes on Current Topics :"—

"Office of Commissioners in Lunacy,
19, Whitehall-place, S.W., Jan. 3, 1867.

"Sir—I am directed to transmit for your perusal the enclosed copy of a paragraph which appeared in the *Times* newspaper of the 15th ult., and to inform you that the house-surgeon of the London Surgical Home, having attended a meeting of this Board on Monday last to explain that paragraph, then substantially admitted to the Commissioners present the reception into the Home of females of unsound mind.

"The Commissioners will now be glad to hear from yourself, as Senior Surgeon of the Home, whether there is any, and what mistake in the paragraph or on the part of the house-surgeon, as to the objects of the Home, and, if any mistake has arisen, whether you have taken, or intend immediately to take, any and what steps to disabuse the public mind upon the subject of this apparent violation of the Lunacy Law.—I am, sir, your obedient servant,

"Charles Palmer Phillips, Secretary.

"I. Baker Brown, Esq."

"136, Harley-street, Cavendish-square, Jan. 5, 1867.

"Sir—In answer to your communication, dated the 3rd inst., I beg to state that the article in the *Times* newspaper to which you refer was written by a gentleman, a perfect stranger to me, who came on the part of the *Times* newspaper, was shown over the Home and supplied with all the papers by the secretary, and I never saw the article until it appeared in print the next morning, was very much vexed at the mistake therein, and instantly took such steps to insure correction as I thought would be sufficient. I have been daily waiting to see my hopes realized, and am now most willing to take any steps the Commissioners may advise to disabuse the public mind upon the subject of any apparent violation of the Lunacy Law.

"I shall be very happy to wait upon the Commissioners to offer any further explanation if they think it necessary.—I remain, your obedient servant, "I. B. Brown.

"Charles Palmer Phillips, Esq."

"Office of Commissioners in Lunacy,
19, Whitehall-place, S.W., Jan. 8, 1867.

"Sir—The Commissioners, observing with pleasure your sense of the gravity of the mistake in the *Times'* article of the 15th ult. upon the London Surgical Home, direct me to acknowledge their receipt of your letter of the 5th instant, and at once to obtain from yourself, as senior surgeon of that institution, a plain and direct contradiction of its being open for the reception of females of unsound mind. The Commissioners doubt not that, in possession of such an authoritative contradiction, they will be able themselves to procure for it that necessary publicity which you have hitherto failed to get.—I am, sir, your obedient servant,

"Charles Palmer Phillips, Secretary.

"I. Baker Brown, Esq., the London Surgical Home."

"136, Harley-street, Cavendish-square, W.,
Jan. 10, 1867.

"Sir—I have no hesitation at once in stating, as senior surgeon and founder of the London Surgical Home, that the institution is not open for the reception of females of unsound mind, and in no papers or advertisements issued or published by authority has it ever been stated so. During last year one patient, a servant, was taken in as suffering from hysteria. I immediately discovered she was of unsound mind, and as quickly as possible had her removed to Hanwell Asylum.—I am, &c.,

"I. B. Brown.

"To C. P. Phillips, Esq., Secretary to the Commissioners in Lunacy, 19, Whitehall-place."

Medical News.

Royal College of Surgeons of England.—The following gentlemen having undergone the necessary examinations for the diploma were admitted members of the College, at a meeting of the Court of Examiners on Friday, viz. :—

Messrs. James Reginald Stocker, Guy's Hospital; Frederick Knowles, Farnham, Surrey; and George Rootes, Ross, Hereford, students of Guy's Hospital; John Davies Thomas, L.S.A., Swansea; Nicholas Marshall, St. Austell, Cornwall, of University College; Daniel Costelloe, Canonbury-square; and John Arnold, L.R.C.P.Lond., Demerara, of St. Bartholomew's Hospital; Richard Lestock Edgeworth, M.B., Univer. Dub., Edgeworthstown, county Longford; and Thomas Mawhinny Watt, M.A., Univer. Aberd., Ballyjamesduff, county Cavan, students of the Dublin School; George William Barrall, Bedford, of St. George's Hospital; William Alfred Renshaw, Aston-on-Mersey (Manchester School); Alexander Richardson Haughay, M.B., Univ. Aberd., Bushmill, county Antrim (Edinb. and Glasgow); Frederick Woolhouse, Sheffield; Robert Carlisle Appleton, Stockton-on-Tees; Henry Vining Bryant, Hackney-road, of King's College, and Charles Tennant, Newbottle, Durham, of the Charing-cross Hospital.

It is satisfactory to state that out of the 69 candidates who have been undergoing their examinations during the past three days for the diploma of membership, only nine failed to acquit themselves to the satisfaction of the Court, and were consequently referred to their studies for the full period of six months.

King and Queen's College of Physicians in Ireland.—The following gentlemen obtained the Licence in Medicine during the months of October, November, and December, 1866 :—

N. W. Allt, 21, Belgrave-square; L. M. Cordner, 4, Belvidere-place; R. M. Craig, 5, Clanbrassil-place; S. Goodisson, Enniscorthy; M. Hanratty, 11, Phibsborough-road; H. J. Hazlett, Lurgan; B. Keelan, Carrickmacross; A. J. Law, St. Brelade's, Jersey; R. P. Murphy, Wexford; H. Murray, Faunet; T. Partridge, Birmingham; H. L. Smith, Borris-in-Ossory; J. F. Supple, 45, Grafton-street; H. G. Thompson, Inistiogue; G. H. Tyndall, Gorey; N. Wade, Kilcock.

The following gentlemen obtained the Midwifery Diploma during the same period :—

Nathaniel William Allt; G. Archdall, Fivemiletown; Louis Maxwell Cordner; Richard Manifold Craig; H. Davy, Kimmage Lodge; Michael Harnatty; Henry James Hazlett; John James Hurley; Bernard Keelan; Robert Powell Murphy; Henry Murray; C. H. Robinson, 6, Merrion-street, Upper; Henry Lionel Smith; James Francis Supple; Henry George Thompson; P. W. Tuite, 43, Longwood-avenue; Nugent Wade.

Meeting of the Longford Guardians.—At a large and influential meeting of the Longford Board of Guardians on the 23rd inst. The Earl of Granard, K.P., in the chair, on the motion of M. W. O'Connor, Esq., J.P., D.C., seconded by H. O. F. Gregory, Esq., J.P., it was unanimously resolved that the salary of Dr. Nicolls, medical officer, be advanced from £90 to £100 a year.

On Monday, the Master of the Rolls gave judgment in a very interesting will case. A wealthy lady of Fox-

cote, near Dudley, named Miss Pargeter, who died about a year ago, was found to have left a will in which, after making large devises and bequests to friends and relatives, she left also the Foxcote estate and the residuary estate, which latter is alone valued at £160,000 to her medical attendant, Mr. Badley, and his son, for the purpose, it is alleged, of secret charitable trusts, for the benefit of Socinian congregations. The Master decided that by virtue of the law of Mortmain those secret trusts were illegal. Messrs Badley are, therefore, trustees not for the charities, but for the next of kin and heirs-at-law.

THE HEALTH OF LIVERPOOL.—A discussion arose at a meeting of the Liverpool Town Council on a proposition of the Dock Board to erect several large blocks of warehouses at some of the new North-end Docks. The chairman (Mr. T. C. Bowring) and several members of the Health Committee attributed much of the high mortality of the borough to the erection of six or seven storied warehouses at the North Docks, which stood as a screen, preventing the river breeze from penetrating to the overcrowded districts. In the south end, where these warehouses did not exist, the mortality was not so high as in the streets at the north end, thus shut in. The discussion was adjourned to give an opportunity for conference with the Dock Board on the question.

CONTAGIOUS DISEASES.—A supplement to the *London Gazette*, contains Orders in Council, dated the 10th inst., on the subject of the acts passed relating to infectious diseases—viz., the 6th Geo. IV., chap. 78, repealing the laws relating to quarantine, and making other provisions in lieu thereof, and to the "Diseases Prevention Act of 1865;" and also refers to the Orders in Council issued in regard thereto, and directs that the provisions of said acts shall from this date be continued in force in every part of England, and on all parts of the sea within the jurisdiction of the Court of Admiralty within three miles of the coast of England for six months from this date, and that the orders of July 14 and Aug. 25 shall be renewed accordingly for said period; and it is ordered that the term "ship" includes vessel or boat, "master" includes any person in charge of a ship, "cholera" includes choleraic diarrhœa, and "nuisance authority" has the same meaning as the Sanitary Act of 1866. The master of any ship within the district of a "nuisance authority," having on board a person affected with, or body dead of, cholera, or anything that has been exposed to the infection of cholera, shall moor his ship in such a place as the "nuisance authority" directs; and if the "nuisance authority" is informed that cholera exists, or has existed within three days, in a ship in his district, he shall give such directions as are deemed requisite for preventing the spread of the disease. The other orders provide for the enforcing of the regulations authorized by said acts when cholera or infectious diseases appear in a district, union, or parish, to be acted on by boards of guardians, medical officers, and other officers, assistants, and servants of boards of guardians.

DR. MARY WALKER.—Among those on the platform at a meeting of the Mile-end Temperance Society, on Saturday week, was Dr. Mary Walker, who appeared in the "bloomer" costume. The *Morning Star* says that upon being asked to speak, Dr. Mary rose, and gave utterance to the following sentiments:—"I am pleased to see you here this evening, because it always does my heart good to see temperance people assemble. I know the effects of intoxicating drinks upon the human system. I have observed as much injury resulting from their use as many of my older friends on the platform. It has happened in the course of human events that in my country (United States) we had a terrible war. I have seen many thousands of soldiers who have been injured by strong drink, and, indeed, many who are now sleeping in their graves would be alive had they not used it is a medicine for their wounds. It is with grief that I hear of medical practitioners prescribing every day of their lives, and to almost every patient they have, something of an intoxicating nature. It is true that great men sometimes commit great errors. I must say that it is my opinion—and I suppose I may express my humble opinion sometimes—that intoxicating drinks, under any circumstances, are unnecessary. I will admit that there are people who may take two or three glasses of wine every day and live to be old men and women, but the majority cannot imbibe in this way, but do themselves harm. It has really pained me when I have seen medical men prescribing a little wine or brandy to infants not a year old. I have long been a teetotaller, and, though in this country I have often been sorely tempted to take intoxicating drinks, I have never yielded, and do not think I shall."

AN INSECT THAT IS "NOT PARTICULAR."—While cockroaches partake largely of the common articles of diet in the ship's stores, they also rather like books, clothes, boots, soap, and corks. They are also partial to lucifer matches, and consider the edges of razors and amputating-knives delicate eating. As to drink, these animals exhibit the same impartiality. Probably they do prefer wines and spirits, but they can nevertheless drink beer with relish, and even suit themselves to circumstances, and imbibe water, either pure or mixed with soap; and if they cannot obtain wine, they find in ink a very good substitute. Cockroaches, I should think, were by no means exempt from the numerous ills that flesh is heir to, and must at times, like human epicures and gourmands, suffer dreadfully from rheums and dyspepsia; for to what else can I attribute their extreme partiality for medicine? "Every man his own doctor" seems to be their motto; and they appear to attach no other meaning to the word "surgeon" than simply something to eat. I speak by experience. As to physic, nothing seems to come wrong to them. If patients on shore were only half as fond of pills and draughts, I, for one, should never go to sea. As to powders, they invariably roll themselves bodily in them; and tinctures they sip all day long. Blistering plaster seems a patent nostrum, which they take internally, for they managed to use up two ounces of mine in as many weeks, and I have no doubt it warmed their insides. I one night left a dozen blue pills carelessly exposed on my little table; soon after I had turned in, I observed the box surrounded by them, and being too lazy to get up, I had to submit to see my pills walked off within a few minutes by a dozen cockroaches, each one carrying a pill. I politely informed them that there was more than a dose for an adult cockroach in each of these pills, but I rather think they did not heed the caution, for next morning the deck of my little cabin was strewed with the dead and dying, some exhibiting all the symptoms of an advanced stage of mercurial salivation, and some still swallowing little morsels of pill, no doubt on the principle of *similia similibus curantur*, from which I argue that cockroaches are homœopathists, although had they adopted the other homœopathic theory first, and taken infinitesimal doses, they would then have experienced the full benefit of that noble doctrine, and the medicine while doing them no good, would have done them just as little harm.—*Chamber's Journal.*

METHYLATED MEDICINES.—An important law, which passed in the last Session of Parliament, for preventing the unrestricted use of methylated spirit in the preparation of medicines, came into operation on the 1st inst. The Act states that, "if any person shall use methylated spirit or any derivative thereof in the manufacture, composition, or preparation of any article, as aforesaid, or shall sell or have in his possession any such article in the manufacture, composition, or preparation whereof any methylated spirit, or any derivative thereof, shall have been used, he shall forfeit the sum of £100, and such article shall be forfeited, together with the vessels or packages containing the same." The Pharmaceutical Society, in drawing attention to this important Act, states that so stringent are the regulations of the Commissioners of the Inland Revenue on the subject that the Board will not allow the spirit to be used in the preparation of medicines for internal use for even cattle. Methylated spirit may, however, be used in the preparation of medicines for external application for both man and beast, for burning in lamps, and for use in our anatomical museums, in the preservation of specimens, it has been found a great boon. The saving effected in the Museum of the Royal College of Surgeons alone has been very great; where formerly as much as 25s. per gallon was paid for the pure strong spirit, the methylated can now be obtained for about 4s. 6d. Notwithstanding the nauseous taste of the article, attempts have frequently been made to disguise it, but ineffectually. Only on Monday last a druggist named Clark, residing in the Saltmarket, Glasgow, was fined £30 for selling methylated spirit to be used as an intoxicating liquor. The stuff was sold in large quantities as "finish," and its effects on the constitution fully justify its name.

REMARKABLE CASE OF SUFFOCATION.—An unusual case of suffocation is reported from West Bromwich. It appears that a man named John Macantire, better known as "Oyster Jack," reached his home about midnight on Saturday last. He had two children living with him, one a boy, aged 11 years, and the other a girl, aged 5. Macantire and family

lived a rather irregular life, but for a long time past he had been a teetotaller, and noted for his steadiness. When he left his little oyster shop for home he took with him the bucket-like stove which sufficed to give him warmth during the day. The cold being intense, he, not satisfied with putting on the bed in which he and the children lay all the available wearing apparel, determined to take his stove upstairs. Unfortunately the room was a very small one—only 9 feet by 8 feet in size—the window was closed, and there was no flue or any other means of ventilation. In this small room he took his stove and went to bed. All Sunday passed without either himself or his children been seen, and when Monday evening arrived without anybody hearing of or seeing them, the neighbours became alarmed, and informed the police. The officers entered the house by means of a ladder. The front room was empty and unfurnished; but on opening the door of the back room they beheld a ghastly spectacle. Macantire and the two children lay side by side in one bed. They were all dead, their mouths covered with foam and partly discoloured. There were no signs of a struggle, and the bed-clothes lay on the bodies without being disordered in the least. The bucket-stove was found to be about one-third full of ashes. It was evident that death had been caused by the fumes from the coke or charcoal which had been used in the stove. Downstairs the supper things were found on the table, and the candle and matches had been put out ready for lighting in the morning.—*Daily Telegraph.*

The Accident Insurance Company, Limited, is formed, with a most respectable direction, for the purpose of continuing the accident portion of the business of the late Accidental and Marine Insurance Corporation. The business it is proposed to continue has been in course of development for a period of sixteen years. In 1865 the company was altered so as to include marine insurances in its operations; but the nature of the businesses was so dissimilar that the two departments were not found to work advantageously together, and marine insurance is not comprehended by the present programme. The claims on accident premiums during the sixteen years averaged 60 per cent. only, leaving a balance of 40 per cent. for commissions and working expenses, and for profit to the proprietors. The business of the company has been to provide an amount at death, from accidental causes, from £50 to £2000, or weekly compensation during complete disablement by accident, from 10s. to £10 per week, or to provide a sum at death and weekly compensation together, at arranged rates of premium, of an exceedingly moderate amount. That the advantages to the community of this system of insurance have been appreciated by the public, the constantly increasing business has shown; and with the excellent working staff of the late company, and a good business to commence with, the new organization can scarcely fail to be very successful. The proposed capital is £50,000, in 25,000 shares of £2 each. The total amount which has been paid in compensation from the commencement of the business is about £228,000.

Notices to Correspondents.

Communications to the London Editor should be addressed to 20, King William-street, Strand; to the Edinburgh Editor at Maclachlan and Stewart's, South Bridge; and to the Dublin Editor, at 3, Lincoln-place.

All Contributions are attentively considered, and unaccepted MSS. are returned on receipt of stamps for postage; but the Editors cannot be responsible for any accidental loss, nor can MSS. or replies be delivered on personal application.

Contributions should be *legibly* written, and only on one side of the paper.

When proofs are forwarded it is of the utmost importance that they should be corrected and returned without delay.

Communications respecting Hospital Reports should be addressed to "Editor of Hospital Reports Department," London, Edinburgh, and Dublin, respectively.

Shaw.—The person named is a qualified member of the Medical Profession.

Clemens.—Your letter will appear in our next.

Aural Surgery.—As I have not seen a reply to "Miser's" request, if he should be still looking for it, I would advise him to take a ladys' crotcheting needle and pass it as far as he can into the auditory canal, probably it will be obstructed by a quantity of inspissated cerumen, which by turning round the needle he may remove, after that the injection of a little warm water probably will put all right, but if it fail, et him blister behind the ear.

MEDICAL VACANCIES.

Birmingham Lying-in Hospital—Resident Surgeon.
Durham County Asylum—Assistant Medical Officer.
St. Mary's Hospital, Manchester—Resident Medical Officer.
St. Pancras and Northern Dispensary—Resident Medical Officer.
St. Pancras Workhouse—Resident Assistant-Surgeon.

MEDICAL APPOINTMENTS.

Atkinson, F. P., M.B., has been appointed Senior Resident Surgeon to the Lying-in Hospital and Dispensary for Diseases of Women and Children, Birmingham.

Barker, J. C., L.R.C.S.I., has been appointed Junior Assistant Medical Officer to the Lancaster County Lunatic Asylum at Rainhill.

Braid, J., M.D., has been appointed Medical Officer and Public Vaccinator for District No. 5 of the Cuckfield Union, Sussex, vice W. G. Tiley, M.R.C.S.E., resigned.

Cowan, P., M.R.C.S.E., has been appointed Medical Officer and Public Vaccinator for District No. 1 and the Workhouse of the Leominster Union, vice J. Beavan, M.R.C.S.E., resigned.

Hart, P. J., L.R.C.S.I., has been appointed Medical Officer to the Constabulary, Lawrencetown, county Galway, and Medical Officer, Public Vaccinator, and Registrar of Births, &c., for the Lawrencetown Dispensary District of the Ballinasloe Union, county Galway, vice T. A. Vesey, M.B., C.M., appointed to the Rostrevor Dispensary District of the Kilkeel Union.

Lightbody, J., M.D., has been appointed Medical Officer and Public Vaccinator for the Kirkby Moorside Union (including the Workhouse), Yorkshire, vice R. Chapman, M.D., resigned.

Matterson, R. T., L.R.C.P.Ed., has been elected Medical Officer and Public Vaccinator for the Newark District of the Newark Union, vice H. R. Smith, M.R.C.S.E., resigned.

M'Dowell, B. F., M.B., L.R.C.S.I., Physician to the Sailor's Home, Dublin, has been appointed a Visiting Surgeon to the Westmoreland Lock Hospital, Dublin, vice R. H. Emerson, L.R.C.S.Ed., deceased.

Moore, J. D., M.D., F.L.S., has been appointed Assistant-Surgeon to the 24th Lancashire Artillery Volunteers.

Warden, C., M.D., has been elected Honorary Surgeon to the Lying-in Hospital and Dispensary for Diseases of Women and Children, Birmingham.

MEDICAL DIARY OF THE WEEK.

Wednesday, Jan. 30.

Society for the Encouragement of Arts, Manufactures, and Commerce.—8 p.m.

Thursday, Jan. 31.

Royal London Ophthalmic Hospital, Moorfields.—Operations, 10½ a.m.

Royal Institution.—3 p.m. Professor Tyndall, "On Vibratory Motion."

King's College Medical Society.—8 p.m. Dr. Fenn, "On Rheumatism and Allied Affections."

Friday, Feb. 1.

Royal London Ophthalmic Hospital, Moorfields.—Operations, 10½ a.m.

Royal Institution.—8 p.m. Mr. Scott J. Russell, "On the Crystal Palace Fire."

Saturday, Feb. 2.

Royal Institution.—3 p.m. Mr. G. A. Macfarren, "On Harmony."

Births, Marriages, and Deaths.

BIRTHS.

Bennett.—On the 18th ult., at Park-road, Liverpool, the wife of James M. Bennett, M.D., prematurely of a son.

Spickernell.—On the 4th inst., at Eastern-parade, Southsea, the wife of Dr. G. E. Spickernell, of a daughter.

Robinson.—On the 6th inst., at Torquay, the wife of Dr. Craven Robinson, of a daughter.

Sanderson.—On the 12th inst., at Edinburgh, the wife of A. Sanderson, M.D., 1st Regt. of Cavalry H.C., of a son.

Elliott.—On the 17th inst., at St. Martins, Stamford, the wife of George F. Elliott, M.D., of a son.

Yeld.—On the 22nd inst., at Bridge-street, Sunderland, the wife of Henry John Yeld, M.D., of a daughter.

MARRIAGES.

Andrews—Crawford.—On the 10th inst., at St. Marys Abbotts, Kensington, Alfred B. Andrews, M.R.C.S.E., of Westgate, Canterbury, to Caroline Eliza Newton, daughter of W. S. Crawford, Esq.

Sissons—Sissons.—On the 16th inst., at the Parish Church, Sculcoates, Hull, William Harling Sissons, Surgeon, of Burton-upon-Humber, Lincolnshire, to Jane Thompson, second daughter of Thomas Sissons, jun., Esq., of Grosvernor-terrace, Hull.

DEATHS.

Young.—On the homeward passage from the West Indies, on board the Royal Mail Co.'s Steam-ship *La Plata*, David M. Young, L.R.C.P. Ed.

Booth.—On the 15th inst., Isaac Booth, Surgeon, of Burslem, Staffordshire, aged 86.

Spencer.—On the 16th inst., Griffin Spencer, late Surgeon R.N. Eng., 1807, of Alfreton, Derbyshire, aged 84.

Ackland.—On the 17th inst., W. Ackland, Surgeon, of Bideford, Devon, aged 76.

Fisher.—On the 17th inst., Thomas Fisher, M.D., of Appian-way, Upper Leeson-street, Dublin, Assistant Librarian, Trinity College, aged 66.

O'Farrell.—On January 25th, at 23, Lower Dominick-street, Dublin, Bridget the beloved wife of Surgeon E. G. O'Farrell.

Original Communications.

PAPERS ON DERMATOLOGY.—No. VI.

PSORIASIS.

By T. W. BELCHER, M.A., M.D.Dub.,

FELLOW AND EXAMINER IN MATERIA MEDICA AND MEDICAL JURISPRUDENCE, KING AND QUEEN'S COLLEGE OF PHYSICIANS IN IRELAND; PHYSICIAN TO THE DUBLIN DISPENSARY FOR DISEASES OF THE SKIN, ETC.

(Continued from 19th Dec., 1866, vol. ii., p. 626.)

C. K., aged 30, and married, by trade a house painter, was admitted to the Dispensary for Diseases of the Skin on the 28th of December, 1865, with a few patches of psoriasis in the vicinities of the joints, particularly of the elbow-joint. He had this affection for some time, and had been treated for it, but had not persevered in the treatment advised by his medical attendant. He had no syphilitic taint, so far as I could ascertain. The form of the disease under which he laboured was that described in my edition of Neligan (p. 251) as psoriasis *aggregata*, the psoriasis diffusa of Willan, the psoriasis *confluens* of Rayer, and the psoriasis *vulgaris* of other dermatologists. The patient had no constitutional disturbance or local irritation; no itching or inconvenience of any kind, except the fact of the eruption. In this case I gave an arsenical mixture, containing three minims of Fowler's solution in each half ounce; and I directed him to take one dose thrice daily, immediately after meals, intermitting for a day or two in case arsenical symptoms supervened, and taking two teaspoonsful of Epsom salts once a-week. For a considerable time after he began to take this medicine there were not any apparent signs of amendment, but neither were there any signs of aggravation of the disease, such as most practitioners see in cutaneous cases, when first "put on arsenic," as the phrase is. There were not any signs of arsenical saturation, and therefore I conclude that the action of the medicine was tonic and alterative. The doses were neither increased or decreased, and there was not any local treatment adopted. On the 23rd of February, 1866, he was nearly well, and on the 2nd of March there was scarcely any trace of the eruption to be seen. I have not seen the patient since, so I conclude he was troubled no further with his old enemy; but if so, it was more by good fortune than because of anything else, for he dropped off attending, as so many do, when he thought himself well, and did not persevere in the use of the arsenical solution, as he ought to have done for at least two or three months after all traces of the disease had disappeared.

This is but one instance of several others which I have treated on the same plan, and though there is nothing novel or original in treating this disease by Fowler's solution; yet I think the case in point illustrates the specific action of a single remedy, and shows that many cases of psoriasis may be cured without the adoption of any local treatment whatever, without giving gradually increasing doses as advised by many good authorities, and without evidence of arsenical saturation, which, according to others, is necessary in cases of this kind. Moreover, it shows that such large doses as fifteen minims, as advised by some—and those no mean authorities—are not at all necessary for ordinary purposes.

Following the plan pursued in my former papers, I will now make a few observations on the disease itself, and I shall endeavour to do so as concisely as possible.

PSORIASIS, the *lepra* of the Greeks, the *vitiligo* of Celsus, *lepre* of the French, *der aussatz* of the Germans; *sahafati* of the Arabian medical writers; and *sappachath* of the Levitical law (Lev. xiii., 2.), may be taken as the representative of the squamous class. Dr. Neligan divided it into psoriasis guttata, psoriasis aggregata, and psoriasis lepræ formis. The first two of these varieties may be said to be stages one of the other, although in all cases this is not found to be so, while the third is the *lepra* of some writers, and may be looked on as the typical and fully developed psoriasis with silvery scales arranged in an ovoid or circular form, and unaccompanied by any constitutional, and, for the most part, by any local irritation.

Dr. M'Call Anderson, in his monograph on psoriasis, describes a variety which he calls psoriasis *rupioides*, because of the disease assuming the shape of large conical crusts, marked by concentric rings. There is also the variety called syphilitic psoriasis, which properly should be classed among the "syphilides," and is therefore outside the range of this paper.

Causes.—It is undoubtedly hereditary, but of course not necessarily so, and in short it may be best described as essentially a blood disease. Mr. Erasmus Wilson believes it to be caused by a syphilitic poison, but many other writers are not of this opinion. So far as my experience goes, it occurs chiefly in those whose health is below par, and is more frequent among what we call the better classes, than among our poorer brethren. At least taking patients number for number, I see more cases of it in private than in dispensary practice.

Diagnosis.—Many practitioners confound chronic eczema with psoriasis. This I have repeatedly seen to occur; and it is the more remarkable, because while there are several points of non-resemblance between the two affections, there are two which may be readily perceived in almost every case. One is the fact, that in psoriasis the scales are of a bright *silvery* colour, while the scales or quasi-scales in chronic eczema are not silvery. The other is, that itching is a very marked symptom in chronic eczema, while so far as I have seen, it is almost entirely absent in psoriasis. Dr. M'Call Anderson remarks thus on this point, in his monograph already quoted (p. 6): "There is curiously enough, a difference of opinion amongst authors as to whether psoriasis is accompanied or not by irritation of the skin—a difference of opinion which is all the less excusable, seeing that we have not here to do with a question of theory, but of fact. Thus, Hardy states that itching is always present, while Devergie informs us that in uncomplicated cases there is never any itching at all. Hebra, on the other hand, states that the itching is only present when the disease is commencing, or when new points of eruption are making their appearance, and that it never continues uninterruptedly during the whole course of the disease. There can be no doubt that the statement of the last-named observer is substantially correct." The diagnosis of syphilitic from non-syphilitic psoriasis is not so easy a matter as that just now mentioned. The points of resemblance and difference are not few; but perhaps the principal are, that in syphilitic psoriasis, there is the coppery tint of the patches of diseased skin common to all the syphilides, as opposed to the dusky red patches of the non-syphilitic; that the extent of the syphilitic eruption is not commonly as great as that of the non-syphilitic; that the patches in the syphilitic disease are usually small and circular, while in the typical disease they are often large and irregular; and that the syphilitic scales are often grey, as contrasted with the bright silvery colour of those in the non-syphilitic affection. Psoriasis has also been confounded with herpes circinatus and pityriasis rubra.

Prognosis.—Mostly favourable, although the disease is essentially chronic, and is very much affected by mental anxiety, particularly among the mercantile classes.

Pathology.—According to some strumous, according to others syphilitic; while most French writers consider it to depend on what they call the "Dartrous Diathesis," of which they deem this affection an exemplary illustration.

Treatment.—In non-syphilitic cases, arsenic is the best remedy; and in cases in which there is suspicion of a syphilitic taint I always now use Neligan's ioduretted solution of the iodide of potassium and arsenic, prescribed thus:—

℞ Liquoris Arsenicalis minima octoginta.
Iodidi Potassii grana sexdecim.
Iodi puri, grana quatuor.
Syrupi Florum Aurantii, uncias duas. Solve.

This solution wil be found fully described in Professor Macnamara's (sixth) edition of Neligan's Medicines, &c., p. 598; and contains in each fluid dram five minims of

Fowler's solution of iodide of potassium, and a fourth of a grain of iodine.

I prescribe forty minims of it for an adult thrice daily after meals. Sometimes it may be given in water; while at other times it may be advantageously taken in infusion of gentian or dulcamara; and it will frequently serve the patient to change the vehicle of its administration from time to time. The effect of this on mind and body is much greater than we should have any reason to expect.

In some cases arsenic must be given to produce the symptoms of arsenical saturation, so well-known as being described by Mr. Hunt; and by Dr. Begbie, in his paper, "On the Use of Arsenic," published in the *Edinburgh Medical Journal* in 1858; but I do not at all think this necessary in ordinary cases.

I may be perhaps excused for quoting from p. 270 of my edition of Neligan on the Skin what I consider an aphorism in the treatment of these cases:—"It generally occurs *that in the treatment of scaly diseases by arsenic or by iodine, the eruption at first presents an aggravated appearance, the affected parts exhibiting an irritated aspect, and the scaly desquamation being much augmented; but these symptoms soon pass away, and signs of amendment begin to show themselves.*" I do not think *local* applications of much use in psoriasis. The fact that so many are recommended is sufficient on this point, even if one had no personal experience; and when to this we add the consideration of the constitutional nature of the disease it will appear reasonable that local treatment can at best be but palliative. Nevertheless, it is much used in Germany, and by some good physicians at home. I have also used it occasionally with advantage, and I have treated the subject at length at p. 274 of my edition of Neligan.

CLINICAL LECTURES

DELIVERED IN

STEEVENS' HOSPITAL,

TOGETHER WITH

OBSERVATIONS ON PRACTICAL MEDICINE.

By Sir HENRY MARSH, M.D., Bart.,
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Edited by J. STANNUS HUGHES, M.D., F.R.C.S.I.,
PROFESSOR OF SURGERY IN THE ROYAL COLLEGE OF SURGEONS IN IRELAND, SURGEON TO THE LORD LIEUTENANT'S HOUSEHOLD.

REMARKS ON CHLOROSIS AND HÆMORRHAGE.*

(Continued from page 73.)

In this disease, "Chlorosis," characterized as it is by a general depression of the vital functions, the wasting of the body is slow; may we not then justly conclude that the activity of the absorbent system is also diminished? and when emaciation does occur, may it not arise more from deficient deposition than from increased absorption? Assuredly in the early stages of this affection, there is scarcely a perceptible amount of emaciation; and it is not until the disease be advanced that this symptom becomes apparent. I have often been struck with the plumpness of those who exhibited unequivocal evidence of the presence of chlorosis, though the same torpor which pervaded the whole system had affected likewise the nutritive function.

The urine in chlorosis possesses distinctive properties of considerable interest: it is usually pale, of low specific gravity, and of a mildly acid reaction; it contains, according to the analyses of Becquerel, a large amount of fixed salts, a small quantity of uric acid, and a very small proportion of urea; the diminution of the urea being both absolute and relative, and always keeping pace with the deficiency of red corpuscles in the blood. The difference between this condition of the urine and that which prevails during the occurrence of hæmorrhage is very striking, and shall be hereafter noticed.

From the general torpor the uterine functions are not exempted; their derangement has been frequently and confidently put forward as the real and efficient cause of this disease, with what amount of truth facts must determine. This opinion derives support from the following considerations:—That chlorosis is especially a feminine disorder; that its origin is often attributed by the patient to a sudden suppression of the catamenia; and that the period of its most frequent occurrence is that of puberty—the period immediately antecedent and subsequent to the establishment of the menstrual discharge. But it must be remembered that this is also the period of the completion of growth; as this period approaches, the various systems undergo rapid development, and then it is, or soon afterwards, that this characteristic pathological state of the blood most frequently arises. To me it has often appeared that chlorosis has a more intimate relation with that epoch of life when the frame has nearly reached its full development, than with the uterine functions. Be that as it may, much stress has been laid upon menstruation, and the derangement of this function has been fixed upon by many as the starting point of the disease.

To what extent do facts and observations sustain this opinion?

In the first place chlorosis is by no means limited to the female sex; and in the next, it may with truth be stated that, in a large proportion of cases, the uterine is not more disturbed than any other vital function; the patient menstruates regularly, but less abundantly than in health, and the fluid excreted is, like the blood, deficient in red corpuscles, and hence in colour less deep. This is the only disturbance of uterine function observable in a considerable proportion of cases of chlorosis; and if the cases be carefully investigated, in which the menses are irregular or suppressed, it will often be found that there existed constitutionally or hereditary a disposition to irregularity or suppression of the monthly discharge. When, however, the disease is far advanced, or extreme in degree, and every vital function impaired, it most commonly happens that this function partakes of the general depression, and either recurs in extremely diminished quantity, and at irregular periods, or altogether ceases. Numerous observations which I have made on this subject lead me to the conclusion, that the irregularity, diminution, and cessation of the uterine function, are the effect, not the cause, of the disease. The derangement of the menses can only be removed by the removal of its cause; the treatment, therefore, best calculated to restore the blood to its normal state is that best suited to the restoration of the healthy uterine action. I have seen cases of this affection treated with no other view than that of reproducing the menstrual discharge, and the treatment has been unsuccessful, because based on an erroneous principle. There is in many cases of chlorosis a profuse and wasting leucorrhœa; this symptom has also been seized upon and announced as a cause; yet this, too, is a consequence, and probably connected with the excess of serum in the blood; like any other prominent symptom, however, arising during the progress of a prolonged disease, it merits especial attention, and requires appropriate local treatment. It is not always safe suddenly and completely to suppress this discharge; it should be moderately checked, whilst the treatment which tends to remove the original disease is steadily employed. It may here be remarked that, in chlorosis, sanguineous exudations are comparatively rare, whilst serous exudations—vaginal, intestinal, pleuritic, peritoneal, cerebral, and subcutaneous, are by no means uncommon. In the management of these affections, whilst local treatment is essentially necessary, the leading object should be to alter and improve the condition of the blood itself. The contrast between the two states, that of chlorosis and that of hæmorrhage, is herein strongly marked; menorrhagia is rare, leucorrhœa by no means uncommon.

Of the characteristic symptoms of chlorosis there is not one more strikingly apparent than the well-known change of colour and complexion by which this disease is recog-

* The Dublin Quarterly Journal of Medical Science, Nov. 1st, 1846. Reported by John Hill, A.M., M.B.

nized. It is not mere pallor, for many healthy persons are extremely pale, it is a morbid aspect—a peculiar greenish yellow tint, familiar to the observant eye, and best expressed in the appearance of the skin after a bruise or ecchymosis, when, absorption being nearly completed, a slight greenish yellow discoloration of the skin remains for several days. It is this hue of the integuments which has given origin to the popular name of the disease, "the green sickness." The peculiar complexion of chlorosis depends upon the diminished proportion of red corpuscles in the blood circulating in the capillary system; as the result of which a yellow tint is imparted to the skin, either from the colouring matter of the liquor sanguinis, termed hæmaphæin, or as the direct consequence of the smaller number of red corpuscles in the vessels; since it is well-known to microscopical observers that the colour of an isolated corpuscle is yellow, and that it is only when aggregated in considerable numbers that they appear red. The change of colour above described is not confined to the external skin, the mucous membranes also, though in a less evident degree, participate in the pale and bloodless hue caused by the paucity of the red corpuscles in the capillary vessels.

Having now enumerated what may be termed the essential symptoms of chlorosis—the depression of animal heat, the prostration of the cerebral, nervous, muscular, cardiac, pulmonary, intestinal, and uterine functions, together with the characteristic hue of the tegumentary membranes—it remains to make a few remarks upon other symptoms, some of frequent, others of occasional occurrence, which, though they belong not of necessity to the disease, are nevertheless so apt to arise during its progress, that to omit them would be to leave the history of this affection altogether incomplete.

The history of diseases would be much simplified were the complications, in the order of their frequency, carefully distinguished from the essential symptoms. These complications perplex and prolong the treatment, which, but for them, would be simple, easy, and certain. There are few diseases more completely under the control of remedies than uncomplicated chlorosis. Of the complications there is none more frequent, none more disturbing to the regular course of treatment, than the various neuralgic affections and local pains with which many chlorotic patients are afflicted. There is an intimate connection between chlorosis and hysteria; none are more disposed to become chlorotic than those who are hereditarily or constitutionally predisposed to hysteria. I have seen, during the progress of this affection, every variety of hysteric symptoms to arise; I have also seen it complicated with chorea. Nearly allied to hysteria, if not identical with it, are those spinal tendernesses and irritations which propagate pains to every part of the body. These neuralgic pains are oftentimes so severe that the lives of chlorotic patients are rendered miserable by them; and so harassing that every other feeling and consideration is absorbed in unceasing solicitude for their removal or mitigation.

Many individuals suffer from intense frontal headache either constant or periodical, from acute pain in one or other of the sides, in the epigastric or hypochondriac regions, and sometimes even in the extremities. In such cases the treatment must be complex; yet whilst the leading object—the amelioration of the condition of the blood—should never be lost sight of, the means best calculated to mitigate and remove the neuralgic complication must not be omitted. In some cases, particularly those in which there exists in some part of the spinal column much pain on pressure, with strongly marked evidences of spinal irritation, it may be necessary to detract blood either by cupping or by leeches. Care, however, must be taken that the quantity of blood drawn should be small; leeches should not be too numerously applied, nor a prolonged bleeding from the bites encouraged. The operation of cupping has, in this respect, a great advantage, that there is no after bleeding, and when it can be quickly and dexterously performed it is a superior remedy. I have seen chlorotic patients permanently injured by profuse local bleeding. In general the frequently repeated application of small blisters on either side of the spine is the preferable mode of treatment. In many cases of spinal irritation the pain and tenderness on pressure are found to exist, not along the line of the spinous processes, but on one or both sides of this line. Moderate pustulation is sometimes more effectual than blisters. For the removal of neuralgia, anodynes, particularly opium, should be sparingly and cautiously given. If it constipate the bowels and diminish the secretions, temporary relief will be often purchased at a dear price. Opium, too, by prostrating the nervous energy, injures the respiratory function, and thus adds to the existing imperfection of the blood. It may be necessary to give an opiate—a night's unbroken rest may not be otherwise attainable; it should, however be looked upon as a thing of necessity, and should, if possible, in chlorosis be avoided. I have occasionally observed marked advantage from small doses of aconite, and in one case of chlorosis with severe facial neuralgia, a great mitigation of pain was effected by a single dose of the canabis indica. All these potent agents, however, which lower the vital energies are ill-suited to a disease, the characteristic of which is to depress, below the normal standard, every function necessary to the maintenance of life. They should be employed cautiously, and should not be long persevered in. The local application of anodynes and sedatives is oftentimes more safe, and in efficacy not inferior to their internal administration. Lint soaked in anodyne lotions, placed upon the painful parts, and overlaid with oiled silk, is in many instances a remedy of value; so likewise is their application over a blistered surface, the cuticle having been removed. The ointment of the sulphate of veratrine (a scruple to an ounce of axunge) I have found particularly efficacious. The neuralgic pain is sometimes, but not often, removed by lightly touching the adjacent skin with heated iron. In all these complications, the first object must be to improve the blood, the second, to remove the neuralgic pains.

(To be continued.)

Hospital Reports.

SUMMARY OF REPORTS PUBLISHED DURING 1866.

In this number we present our readers with a carefully compiled summary of the valuable matter included in our Hospital Reports during the year 1866, and comprised in Vols. i. and ii. of The Medical Press and Circular. We do not hesitate to express our conviction that this summary will very much enhance the value of these reports, both as furnishing a ready means of reference to those specially interested in any particular disease or operation, and as exhibiting the large amount of valuable matter published in this most practical part of our journal. A journal such as The Medical Press and Circular is not only useful as a record of passing events, but also as a register for ready reference in all departments of our profession. It will be seen that the arrangement of names is alphabetical, and the volume and page are given in each case:—

Adams, Mr., Surgeon to the London Hospital, treated at that institution a case of Psoas Abscess, in opening which the femoral artery was wounded. The case is detailed at length.—Vol. ii., p. 121.

Althaus, Dr., Physician to the London Infirmary for Epilepsy and Paralysis. (*a*) The mode of treatment for Epilepsy adopted by Dr. Althaus in this hospital is detailed at length.—Vol. ii., p. 173. (*b*) Some cases of paralysis treated at this hospital by the same gentleman are given in illustration of the theory, "that that which holds good for the sentient nerves is also, to a certain extent, the case with the motor nerves, which have to be subdivided into three different sets, as regards their relations to Faradisation, galvanisation, and volition."—Vol. ii., p. 490.

Brown, Mr. Baker, Surgeon to the London Surgical

Home.—(*a*) Three cases treated by this gentleman at the Surgical Home are reported. Case 1 is "Colloid Tumour of Ovaries, Uterus, and Rectum, with Ascites; attempted Extirpation." Case 2 is an "almost solid Tumour, implicating Uterus and Right Ovary, and filling up the cavity of the Pelvis; Partial Extirpation." Death occurred in this and in the preceding case. Case 3, "Dropsy of an Ovule escaped into the Peritoneal Cavity extensively attached to the Omentum; Extirpation; Recovery."—Vol. i., p. 78. (*b*) Three successfully treated Cases of Ovariotomy, with particulars of the operations, are also given.—Vol. ii., p. 202.

Banks, Dr., Clinical Physician to Sir Patrick Dun's Hospital.—(*a*) A most remarkable Case of Cerebro-Spinal Arachnitis treated at this hospital is reported. The report contains a concise account of this disease, with particulars of the post-mortem examination made by Dr. Bennett, University Anatomist. It formed the subject of a leading article in the same number of the journal in which it appeared.—Vol. i., p. 561. (*b*) Also a Case of Lead Paralysis successfully treated by Electricity is reported.—Vol. ii., p. 488.

Barton, Mr., Surgeon to the Adelaide Hospital.—A successfully treated case of Strangulated Femoral Hernia, with details of the Operation.—Vol. i., p. 98.

Beigel, Dr., Physician to the Metropolitan Free Hospital.—(*a*) A Case of Whooping-cough cured by Hypodermic Injections of Acetate of Morphia, in doses of one-twelfth of a grain. (*b*) Also, a Case of Ague in an Adult cured by Hypodermic Injections of the same drug, in doses of one quarter of a grain.—Vol. ii., p. 68.

Bryant, Mr. Guy's Hospital.—Three Cases of Successful Treatment of Stone in the Bladder by Lithotrity, with details of operation in each case.—Vol. ii., p. 149.

Collis, Mr., Surgeon to the Meath Hospital.—Summary of Operations performed in the Meath Hospital by this gentleman, in May 1866, for Right Femoral Hernia in a Female; Complete Dislocation of both Bones of Right Forearm backwards at the Elbow; Right Femoral Hernia in a Man; Double Harelip in a Boy; Pannus of Left Eye in a Man; Depressed Fracture of Skull in a Man; Necrosis of Lower End of Right Femur; Vesico-vaginal Fistula.—Vol. i., p. 591.

Fergusson, Sir Wm. King's College Hospital.—(*a*) Pulsating Tumour at the Root of the Neck—two cases; Popliteal Aneurism; Tumour in the Hypogastrium, with Undescended Testicles.— Vol. i., p. 100. (*b*) Also, an Account of an Operation for Cleft Palate; and of a Case in which Sir William tied the Femoral Artery for Popliteal Aneurism.—Vol. i., p. 147. (*c*) Together with Details of an Operation for the Removal of a large brain-sized Tumour from the Calf of the Leg of a Young Lad.—Vol. i., p. 171.

Grimshaw, Dr., Cork-street Fever Hospital, Dublin.—Account of a Case of Typhus Fever with Enteric Symptoms, which terminated in Cholera, and subsequently recovered. The account of this case contains nine sphygmographic illustrations.—Vol. ii., p. 438.

Hamilton, Mr., Surgeon to the Richmond Hospital.—(*a*) Three Cases of Chronic Abscess, exemplifying the different methods advantageously used in the treatment of these abscesses according to the peculiar nature of each. These cases are of importance, because such abscesses are frequently mistaken for other surgical affections.—Vol. i., p. 417. (*b*) Also, a Case of Hysterical Wry-neck; and one of Poisoning by Oxalic Acid, with the unusual occurrence of a *straw-coloured* vomit.—Vol. i., p. 484.

Hayden, Dr., Physician to Mater Misericordiæ Hospital.—(*a*) A remarkable and fully-detailed Case of Thoracic Aneurism.—Commenced Vol. i., p. 303; concluded Vol. i., p. 449. (*b*) A Case of Ascites, with Anomalous Thoracic Signs.—Commenced Vol. i., p. 333; concluded, with account of post-mortem examination, Vol. i., p. 563. (*c*) A remarkable Case of Softening of the Left Anterior Lobe of the Cerebrum, with Right Hemiplegia, and Loss of Speech, exhibiting a striking impairment of the faculty of articulate language.—Vol. i., p. 540. (*d*) Clinical Report on Three Cases of Cerebro-spinal Arachnitis.—Vol. ii., p. 439. (*e*) Two Cases of Peritoneal Pneumatosis, which Dr. Hayden regarded as exceptional in regard to many of the features laid down as characteristic of this affection by the late Dr. Graves ("Clinical Medicine," Vol. ii., p. 77).—Vol. ii., p. 540.

Hogan, Dr., Staff Assistant-Surgeon.—A Complicated Case of Purpura Hæmorrhagica, treated in the General Military Hospital, Phœnix Park, Dublin. This case was fatal, and the report contains an account of the post-mortem examination.—Vol. ii., p. 388.

Hughes, Dr., Physician to the Mater Misericordiæ Hospital.—(*a*) Two Cases of Acute Pneumonia — one treated by tartar emetic, the other by moderate stimulants; recovery and rapid convalescence in both instances. Dr. Hughes holds the opinion that no peculiar or specific treatment is applicable to all cases of acute pneumonia, but that the local inflammation in each case subsides concurrently with the fever.—Vol. i., p. 627. (*b*) Two Cases of Phthisical Hæmoptysis. In these cases the mode of death was different, but the cause the same. In the one the hæmorrhage was directly fatal, in the other indirectly.—Vol. ii., p. 122.

James, Dr. Prosser., City [of London] Dispensary.—Four Acute Cases, treated by the Internal Administration of Tincture of Aconite. Dr. James employs tincture of aconite in cases in which there is an increase of the heart's action, as a febrifuge, as an anodyne, in cases of nervous excitement, palpitation, and organic cardiac disease.—Vol. ii., p. 121.

Little, Mr., London Hospital.—(*a*) A Case of Gunshot Fracture of the Temporal and Frontal Bones. (*b*) Fracture of the Skull from Pistol Shot. These cases of gunshot wounds, occurring in civil practice, are sufficiently interesting to deserve special record.—Vol. ii., p. 221. (*c*) A Case in which Hernia Protruded between the Femoral Artery and Vein with an account of Mr. Little's operation, and the recovery of the patient.—Vol. ii., p. 618.

Lyons, Dr., Physician to the Hospitals of the House of Industry, Dublin.—1. A Case illustrating the use of Capsicum in the treatment of Delirium Tremens. This mode of treatment has been quoted in various home and foreign journals.—Vol. i., p. 395. 2. A Case of Phantom Tumour of the Abdomen; one of Pneumonia, treated by Tonics; and one of Tuberculization of Lung in which Gangrene of the Brain was found after death.—Vol. i., p. 418. 3. Aphthous and Œdematous varieties of Tonsillitis, with remarks on treatment by Caustic and by the Tonsillotome.—Vol. i., p. 449. 4. Dr. Lyons' views on Typhus Gravior, Eruptions in Typhus, and an illustrative Case of Typhoid Fever.—Vol. i., p. 482. 5. Cases of Typhoid Fever, Low Typhus, and "Black Death."—Vol. i., p. 503. 6. A Case of Double Pneumonia, treated on the Tonic plan; and one of Cerebro-Spinal Arachnitis.—Vol. i., p. 539. 7. Cases illustrative of the use of a new febrifuge, "Chlorate of Quina." This preparation has been noticed in various home and foreign journals since its recommendation in our columns.—Vol. i., 562. 8. Cases of Rheumatic Fever under Alkaline Treatment.—Vol. i., p. 591. 9. Febris Nigra, or Black Death, further remarks on and statistics of it.—Vol. i., p. 525. 10. Therapeutics Notes on the employment of Capsicum in Delirium Tremens; of the use of Chlorate of Quina; and of a Syrup of the Phosphates of Iron, Quina, and Strychnia.—Vol. i., p. 653. 11. Miscellaneous Notes on Scarlatina and Rheumatic Arthritis; Scarlatina, with Mixed Eruption; Chronic Pericarditis; Acute, Non-Complicated, and Latent Pericarditis; Cerebro-Spinal Arachnitis; and Syrup of the three Phosphates.—Vol. i., p. 682. 12. Two Cases of Arachnitis, chiefly at the base of the Brain; and one of Persistent Partial Dilation of the Right Pupil without discoverable cause.—Vol. ii., p. 10. 13. Five Cases of Irritable Aorta.—Vol. ii., p. 35. 14. Two Cases of Arachnitis situated at the base of the Brain.—Vol. ii., p. 69. 15. Miscellaneous Notes on Typhoid Fever, Hay Fever, and Hay Asthma.—Vol. ii., p. 98. 16. Three Cases illustrating the Disappearance of Organic Cardiac Murmurs.—Vol. ii., p. 123. 17. A Case of Phthisis

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Proceedings of Societies.

SURGICAL SOCIETY OF IRELAND.

FRIDAY, JANUARY 18, 1867.

Dr. Butcher, President of the College, in the Chair.

Dr. Wharton exhibited

A SPECIMEN OF COMPOUND FRACTURE,

and proceeded to say—On last night week, sir, a couple of ladies were returning home from Baggot-street, where they had been spending the evening. From some cause or other, whether owing to the restiveness of the cab-horse, or from carelessness on the part of the driver, I am unable to say, but the door of the cab in which they were seated burst open, and one of the ladies put out her leg, as she stated, with the view of saving her sister; while in the act of doing this the cab upset, and her leg was caught between the cab and the ground. She remained in this position for fully ten minutes, till sufficient help was obtained to raise the cab. She was brought to the Meath Hospital, and I saw her in half an hour afterwards, and found the state of things which I shall now attempt to describe. There was a large wound in front of the leg, just above the foot. Both bones were broken, and protruded. The limb was somewhat in this position, merely kept together by means of the skin. Upon introducing my finger into the wound, I found what I may describe, in familiar language, as a

thorough smash. Of course, then, this specimen is a compound comminuted fracture of both bones of the leg. On passing my fingers along the outside of the limb, I found this fracture of the fibula just at the astragalus. On passing my finger over the dorsum of the foot, I found considerable depression. The great amount of blood which had been lost, the age of the patient, which was 67 years, induced me to propose immediate amputation. This was at once acceded to by my colleagues I had summoned to my help. The proposal was accepted on the part of the lady, though of course with a good deal of hesitation. The lady survived the operation for very nearly a week. The great amount of blood which had been lost, the extensive wound in front, the age of the patient, convinced us that it was hopeless to attempt to save the limb, and the result of the examination afterwards justified the course we followed. The lady survived the amputation for a week, and she appeared to have died from exhaustion. She became delirious on the day following the operation, which continued, with only slight intervals of reason, till the day of her death. The main artery of the limb was not destroyed. We could feel its pulsation, notwithstanding it appeared to us that the only hope which presented itself was to submit to herself and relatives the propriety of immediate amputation, which was done as soon as she recovered from the prostrate state into which she had been thrown by the first shock of the accident.

OBSERVATIONS ON ACUTE GLOSSITIS, ILLUSTRATED BY SEVEN CASES.

By Henry Gray Croly.

Mr. President—One of the first urgent cases which I was called upon to treat was acute inflammation of the tongue. I had not an opportunity of seeing the disease during my pupilage, though in constant hospital attendance as clinical clerk. Subsequently, however, in the City of Dublin Hospital, I observed and noted several cases of this affection, and since then I have had *seven* patients suffering from this disease under my own care. I am desirous of bringing those cases under the notice of the Society, as illustrative of glossitis and its treatment, with extracts from medical and surgical writers to further elucidate the subject, concluding with practical observations on the causes and treatment of this important disease. I may mention that at one of the meetings of this Society, about two years since, I had the honour of reading a paper on cancrum oris, and at a subsequent meeting a communication on scalds of the glottis. An interesting discussion was elicited on both occasions. The present subject will form a continuation of the previous papers.

ACUTE IDIOPATHIC GLOSSITIS, ENDING IN SUPPURATION, AND FOLLOWED BY ABSCESS AT THE BACK OF THE PHARYNX; RESULT, RECOVERY.

Case 1.—J. M., aged 19 years, a farm labourer, of temperate habits and robust frame, bathed in the sea at Bray on the 17th of August, 1856; did not dry himself sufficiently; got a wetting on his way home; the following day he went to work as usual; reaped corn and worked very hard; on his return home in the evening he was attacked with severe shivering, felt soreness in his throat, and had slight difficulty of swallowing; he tried to work on the next day, but failed; felt his tongue swollen. I was requested to visit him on the 20th instant, by his father, who stated that his son had lumps in his throat, and was choking. On arriving at his house I found him sitting up at the fire, with an anxious and flushed countenance; saliva dribbling from his mouth; speech thick and indistinct; tongue swollen and tender to the touch; mucous membrane covering the sublingual space infiltrated, and raised on a level with the top of the teeth; considerable hardness under the chin; pulse 120, and full; patient has not slept since the commencement of the attack. I immediately punctured with a sharp-pointed bistuory the sublingual space, which was followed by a free discharge of blood and serum; prescribed a mixture containing tartar emetic in nauseating doses, administered a brisk purgative, and ordered half a dozen leeches to be applied under the chin. I recommended incisions into the tongue, which were objected to.

August 21st. Tongue swollen and indented by the teeth. It was now evident that matter had formed in the cellular space underneath the tongue, and after considerable persuasion, I was permitted to make an incision under the chin, which I accordingly did, passing the scalpel well up in the *median line*, which gave exit to a large quantity of blood and pus.

22nd. Pus flowing freely through the openings at each side of the frænum linguæ, where I made the punctures, and on pressing the tongue on the dorsum pus escaped in large quantity through the incision beneath the chin. The treatment now consisted in the application of linseed poultices, quinine mixture, and beef-tea. In four days the patient complained of soreness in his throat and difficulty of swallowing. On examination I observed a large abscess at the back of the pharynx, which I opened with a bistuory, guarded with lint nearly to the point. Some very fœtid pus was thus evacuated, to the immediate relief of the patient, who steadily improved, and was very soon in the enjoyment of his usual health.

ACUTE IDIOPATHIC GLOSSITIS, INVOLVING THE LEFT HALF OF THE ORGAN ONLY, ENDING IN RESOLUTION.

Case 2.—J. K., aged 38 years, of temperate habits, but an inveterate smoker, by occupation a warder in the Spike Island Government Convict Prison, of which I had charge; had not been exposed to wet or cold lately; could not assign any reason for the attack. This man presented himself at the prescribing-room attached to the hospital on the morning of the 20th of November, 1860, complaining of sore throat, accompanied with pain and difficulty in swallowing; he was much disturbed during the night, slept badly, and started up frightened by unpleasant dreams; his speech was thicker than usual, and his expression presented much anxiety. I made a careful examination of his throat, but found the tonsils, uvula, and palatine arches free from even slight efflorescence; he winced when I made pressure with my finger on the *base* of his tongue, particularly when I pressed on the *left* side of the raphe. I ordered the man to be admitted at once into the hospital and prescribed a purgative.

November 21st. Patient has not slept; his bowels were freely acted on by the medicine; there is a slight swelling of the left side of the tongue *near its base;* skin hot and dry. A diaphoretic mixture prescribed.

22nd. Patient's speech is very *thick;* he had a bad night; he says he has *acute pain* in his tongue far back at the left side; countenance not very anxious; he coughs occasionally, and then discharges from his mouth a quantity of viscid ropy mucus; there is a slight swelling under the angle of the left jaw, not so far back as the tonsil, which is very tender to the touch; the tongue is now considerably elevated towards the roof of the mouth at *the left side*, the right side seems natural; the edges of the organ are red, and the centre covered with a white exudation; the left side of the *apex* has a thick rounded appearance, and contrasts remarkably with the opposite part; the sublingual space is slightly elevated, and the crest running up towards the under surface of the apex of the tongue is visible, but not very distinctly; the patient says he had several severe shivering fits during the night; the saliva dribbles constantly from his mouth. The tongue having been well dried, I applied six leeches on its anterior and left side (a thread was previously passed through the end of each leech), they filled rapidly and fell off; the bleeding was encouraged by gargling with warm water.

23rd. Tongue much less swollen, but still considerably enlarged; the tenderness and swelling continues under the left angle of the jaw; three leeches were applied to the painful part; a soft poultice of linseed-meal was applied when the leeches fell off.

24th. Patient slept well; countenance natural; he was discharged cured in a few days.

ACUTE IDIOPATHIC GLOSSITIS ENGAGING THE ENTIRE TONGUE, TERMINATING IN RESOLUTION, IN A BOY 13 YEARS OLD.

Case reported by Mr. W. I. Wheeler, Purser-Student (now Dr. Wheeler.)

Case 3.—A. L., a delicate-looking boy, aged 13, was admitted into the Children's Ward of the City of Dublin Hospital, on the 12th of November, 1864, under Mr. Croly's care, suffering from inflammation of the tongue. His mother cannot assign any reason for the attack. On admission his countenance was anxious; his tongue much enlarged and protruded from the mouth; his respiration was difficult and he could scarcely swallow. Mr. Croly made a free incision with a sharp-pointed bistoury at each side of the raphe, from which blood and serum flowed profusely. The wounds gaped widely, and as the hæmorrhage continued very smartly, the wounds were plugged with lint; the plugs were removed in a few hours; there was no further bleeding; the little patient was greatly relieved by the prompt treatment.

November 13th. Wounds looked like mere scratches; the boy slept well; took wine and beef-tea; his tongue was entirely *in* his mouth.

14th. The incisions gaped a little ; patient much improved in strength.

18th. Tongue quite natural ; discharged cured.

ACUTE IDIOPATHIC GLOSSITIS AFFECTING THE LEFT HALF OF THE TONGUE : RESULT : RESOLUTION.

Reported by Mr. (now Dr.) Nugent Wade, Purser-Student.

Case 4.—J. C., aged 30 years, cab driver, was admitted into the City of Dublin Hospital, September 5th, 1865, under the care of Mr. Croly, suffering from inflammation of the tongue.

Previous History.—Has always been healthy and temperate ; was not exposed to wet or cold before the present attack ; never took mercury. About a fortnight before admission to hospital he felt a stinging pain under his left eye ; three days subsequently he noticed a swelling under his left jaw-bone (near the angle) ; he slept badly ; his tongue became swollen and painful at the left side ; the swelling increased rapidly in one night, and prevented him taking any breakfast on the following morning.

State on admission to hospital.—Left half of tongue very much swollen, protruded from mouth, and indented on left side by the teeth ; anterior surface of the organ covered with white tenacious mucus ; left submaxillary gland considerably enlarged, very hard and extremely painful to the touch ; saliva flows freely from the mouth ; deglutition, articulation, and respiration impaired ; pulse full and frequent ; fœtid breath ; teeth loose at left side. Mr. Croly ordered four leeches to be applied to the inflamed submaxillary gland ; hot poultices were kept constantly on, and a gargle of alum and chlorate of potash was prescribed to be used frequently ; a purgative was also administered. The leeches bled copiously, and required matico leaves to arrest the hæmorrhage. The tongue regained its normal appearance, and the patient in a few days was discharged cured.

ACUTE IDIOPATHIC GLOSSITIS INVOLVING THE ENTIRE ORGAN, BUT MORE MARKED AT THE RIGHT SIDE, ENDING IN RESOLUTION.

I am indebted to Dr. Nugent Wade for the notes of this case also.

Case 5.—Christopher Pallas, aged 15 years, a strong healthy-looking boy, by occupation a messenger, was admitted into the City of Dublin Hospital on Thursday, September 7th, 1865, under the care of Mr. Croly, suffering from inflammation of the tongue.

This boy says he caught cold by sleeping out all night on a car (about a week before his admission to hospital) ; on the morning following he felt his throat very sore ; four days subsequently he suffered from severe pain in both ears (worse in the right ear than left) ; his tongue became painful and swollen, and he swallowed with difficulty ; on admission his tongue filled the cavity of the mouth completely ; it projected slightly, and was covered with a white fur. The right half is more enlarged than the left ; fœtid saliva dribbles from the mouth ; submaxillary gland hard and painful to the touch ; the patient can with difficulty swallow, even fluids ; articulation imperfect ; speech thick.

Mr. Croly made two parallel incisions in the tongue, one at either side of the raphe. A large quantity of blood, pus, and serum escaped. The patient was directed to wash his mouth with tepid water ; all hæmorrhage ceased very soon ; a purgative was administered, and an antimonial mixture to subdue the inflammatory symptoms.

The patient was discharged cured in a few days.

ACUTE IDIOPATHIC GLOSSITIS, FOLLOWED BY ABSCESS UNDER THE ANGLE OF THE JAW.

Case 6.—M. B., a servant maid, was admitted under my care in the City of Dublin Hospital on the 1st of May, 1865, suffering from acute inflammation of the tongue and sublingual glands. She was sent in to me by Dr. Chapman, Medical Officer to the Donnybrook Dispensary District.

History.—She caught cold from wet feet ; had shivering fits ; felt soreness *under* her tongue ; her voice soon became affected, and the tongue swollen.

The catamenia were irregular of late, and she states that at the period she ought to menstruate her tongue swells ; deglutition caused much annoyance, and she became hot and sick. On admission her tongue was observed to be swollen, and her expression was indicative of the disease ; but the mucous covering of the sublingual region seemed to be more affected than the substance of the tongue itself ; her voice was indistinct and speech *thick* ; she could not bear pressure *on* the tongue or under the chin.

I made punctures with a sharp-pointed bistuory at each side of the frænum linguæ, and also incised the tongue at each side of the raphe ; the hæmorrhage was free, and the patient felt instantaneous relief ; a purgative was prescribed, and hot poultices beneath the chin ; she was also directed to clean her mouth ; warm bath. She remained three weeks in hospital, and was then discharged well. The tongue was restored to its natural size. After her discharge from hospital she got inflammation in the left angle of the jaw ; five leeches were applied ; an abscess formed subsequently in that region, and was opened by Dr. Chapman.

INFLAMMATION OF THE TONGUE FROM ERYSIPELAS, ENDING IN RESOLUTION.

Case 7.—H. S., aged 68 years, was admitted into the City of Dublin Hospital on the 3rd of November, 1866, with a large epulis involving almost the entire right half of the lower jaw. On the 6th of November I removed the half of the maxilla from the articulation. On the 13th instant the patient was attacked with a mild form of erysipelas of the face. On the 15th instant he complained of his tongue being sore ; the organ swelled rapidly, and at my night visit was enormously enlarged and protruded through the wound ; dyspnœa was urgent, and swallowing very difficult. I made free incisions on the anterior surface of the tongue, at the right side of the raphe (the left side was not much infiltrated and did not require incisions). The relief was almost immediate.

The Irish School in this, as in other important medical and surgical diseases, has been foremost in adding to our practical information. Our great clinical teacher Graves, and subsequently Dr. Fleming and Professor Geoghegan, have written ably on this subject.

Graves, in his "Clinical Lectures," says : "True idiopathic glossitis is an extremely rare disease. Frank only saw one case of it during his whole life. Four cases of it have been observed of late in different parts of Europe, one of which is given in a German journal, on the authority of my friend Dr. Gottel of Elbing, a gentleman upon whose accuracy implicit confidence may be placed. In none of these cases, however, was the inflammation limited to one-half of the tongue. Dr. Neligan informs me that he had a case of idiopathic glossitis under his care in Jervis-street Hospital, in the year 1846 ; it occurred in a stout country-man, aged 40, and was caused by his working for some days up to his waist in water. The affection came on with rigors ; the entire organ was engaged and so enormously swollen as to prevent the patient from articulating, swallowing, or closing his mouth. Deep incisions were made *transversely* into the substance of the organ, which were allowed to bleed freely, and he was put rapidly under the influence of mercury."

Dr. Fleming, in the *Dublin Quarterly Journal of Medical Science*, says: "Inflammatory attacks of the tongue are seldom or never idiopathic, and that the tendency of the affection to attack only one-half of the organ is in practice constant and remarkable." A form of rapid and alarming engorgement of the tongue is also described by this gentleman, who questions that such is a true glossitis, and rather considers it an active hyperæmia of the organ for which he recommends copious leeching locally, and under the chin, or free incisions on one or both sides of the raphe. My father witnessed a very curious occurrence a couple of years ago in the neighbourhood of Rathfarnham, illustrating the rapidity with which engorgement of the tongue may take place. A donkey got his tongue through the ring of the snaffle bridle ; the driver remarked the uneasiness of the animal, and on examining him found his tongue enormously distended with the ring of the bit imbedded deeply in his tongue. My father informed me that the affection resembled very much a well-marked case of paraphymosis ; under his direction the blacksmith filed across the ring, when the tongue almost immediately reassumed its natural appearance." Dr. Fleming next calls special attention to a rare form of inflammation originating in the loose areolar tissue beneath the genio-hyo glossi muscles, and first recognized by uneasiness in the movements of the tongue, and the sensation as if there was a ball or a lump at its base, a fulness under the chin, impeded respiration, loss of power of deglutition, and risk of suffocation. Dr. Fleming considers this to be a most painful affection, and accompanied by an amount of danger, and that danger often instantaneous. The first of my cases coincides with this latter form of the disease described by Dr. Fleming, terminating in abscess under the chin, and the treatment I adopted was most successful.

Rapid œdema of the tongue, extending to the larynx, occasionally follows the operation of ligaturing portion of the organ for the purpose of removing a cancerous growth, and may require bronchotomy.

Prolapsus linguæ described by Lassus, is considered to be a congenital affection. Mr. Syme gives the history of three such cases in his "Observations on Clinical Surgery," and cured some of them by pressure of bandage and a lotion.

Chelius (by South) speaks of enlargement of the tongue as a congenital affection; "he says this affection must be distinguished from that protrusion which depends on inflammatory swelling."

Yet he does not give any account of acute glossitis.

In The Medical Press for 1860, Professor Geoghegan published a series of seven interesting cases of acute iodiopathic glossitis which were under his care in the City of Dublin Hospital. He says: "Acute inflammation of the tongue is generally reported to be a very uncommon affection. Personal experience leads me to doubt the accuracy of such statement, and to surmise that the paucity of *recorded* cases has been confounded with rarity of the disease."

Case 1.—Acute glossitis terminating in sublingual abscess, and followed by relapse.

Case 2.—Subacute glossitis, terminating in resolution.

Case 3.—Acute glossitis, followed by sublingual abscess.

Case 4.—Acute glossitis; abscess in the muscular substance of the tongue.

Case 5.—Acute glossitis; abscess in the cellular capsule of the sublingual gland.

Case 6.—Acute glossitis; abscess in soft parts beneath the tongue, followed by one in the muscular structure of the organ.

It is remarkable that of these seven cases six terminated in abscess, and only one in resolution.

I find that Dr. Wharton, in The Medical Press (August, 1860), recommends punctures with a lancet beneath the tongue as likely to lessen the tendency to suppuration.

In my Case No. 1, which occurred in 1856, I adopted the practice thus advised by my friend Dr. Wharton with some relief, but not so effectually as to prevent the formation of matter.

Sir Wm. Fergusson, in the last edition of his admirable work on "Practical Surgery" (page 587), published 1857, says:—

"I have seen several instances of remarkable swelling about the tongue which I could not account for from any previous experience. In one of these there was considerable swelling of the organ, copious flow of saliva, difficulty of speech, and remarkable difficulty and pain in deglutition. These features, and considerable œdema about the mucous membrane under the tongue, led me to suspect abscess about the back part of the organ, but a close examination failed to detect the presence of matter. During increased suffering the patient suddenly became aware of the presence of additional fluid in the mouth, and soon perceived a quantity of matter which he supposed had come from about the root of the tongue. There was speedy relief, and the result was all that could be desired. Some time after I saw a case very like this one, and anticipated a similar end; but the patient, a strong middle-aged man, died from exhaustion, without any discharge of matter. In both of these instances the palate, uvula, and tonsils were *not* involved, so that there was no appearance of ordinary cynanche. In August, 1856, I had to travel some distance to see a gentleman who had been unable to speak or swallow for some days. The pain at the root of his tongue was sufficient to deter him from making any efforts of the kind. On a careful examination I fancied there was a swelling and some fluctuation at the back part of the tongue, near the epiglottis, and, under the impression that matter was there, I made a puncture with a slightly curved lancet, and let out a considerable quantity of fœtid pus. The relief was so rapid that the patient could swallow and speak audibly in a few minutes after. Such cases are, in my experience, very rare."

It appears to me remarkable that a surgeon of such undisputed eminence as Sir Wm. Fergusson should not have been familiar with glossitis before the year 1857, when he published the last edition of his work on surgery.

The cases recorded by that gentleman, though not named or classified as glossitis, were evidently of that nature. The first of his cases ended by the abscess opening itself into the mouth; in the second of his cases death occurred without surgical operation; in the third case Sir Wm. Fergusson relieved the patient by incision into the abscess situated at the back part of the tongue near the epiglottis.

The hospital physicians and surgeons of this city have been long familiar with the symptoms and treatment of this disease in its varied forms.

Having thus detailed the history of seven cases of glossitis which occurred in my own practice (the first in the Enniskerry Hospital, the second in the Hospital attached to the Government Convict Prison at Spike Island, and five in the City of Dublin Hospital, within the last three years), and having quoted extracts from various authorities on the subject, I shall conclude this paper with such practical comments as I think deserving of notice.

The following are the *causes* of glossitis mentioned by authors:—

1. Exposure to wet and cold (the idiopathic form).
2. Mercurial salivation.
3. Erysipelas spreading through the mouth.
4. Variola, or other eruptive diseases.
5. Stings of wasps or other venomous insects (in fruit season).
6. Wounds of the tongue, such as bites during mastication, or epileptic paroxysms.
7. Burns and scalds.
8. Incautious or accidental mastication of acrid or irritating substances, as briony or wild rice, the mandragora, the aruna, and other poisonous plants. (Copeland saw a case of diffuse asthenic glossitis caused by masticating monkshood through accident.)
9. The excessive use of tobacco.
10. Caustics, acid and acrid chemical compounds. (Hot articles of diet).
11. Operations on the teeth, or for ranula.
12. The administration of mustard has produced it when given in cases of poisoning.
13. Suppression of the menses or other accustomed discharges.

I may here mention that the idiopathic appears to be the most frequent variety of the disease, though generally considered to be very rare. Six of my seven cases were purely of that type, and all of Dr. Geoghegan's were of the same nature. Young and healthy men are most prone to this form of the affection, and the inflammation is most frequently *sthenic* in its character. When produced by excessive mercurial action, or suppression of the salivary flux, there is generally much *more tumefaction* than actual inflammation of the organ.

When glossitis occurs as a complication of erysipelas, smallpox, scarlatina, or pestilential maladies, the inflammation is of the *asthenic* type; the symptoms are urgent, and the progress of the disease is rapid; pain and tumefaction are great, and the inflamed parts become livid; the fever is characterized by vital depression, quick and weak pulse, &c; and the variety caused by animal poison or stings of insects often ends in gangrene.

Unlike in its prominent features to other diseases, I do not think it necessary to dwell on its distinguishing features, as I assume no practical surgeon could be mistaken in the diagnosis. From the extreme vascularity of the tongue, and its distensible covering, the organ is liable to swell to an enormous size with great rapidity, and hence the term *erectile glossitis*. When the tongue suppurates the disease is called *suppurative glossitis* (nonfrequent, perhaps, when one side only is engaged), whilst the form produced by mercury is called *mercurial glossitis*.

The following are the most prominent symptoms, constitutional and local:—Rigors, pyrexia, headache, soreness in the throat (a symptom almost invariably present), anxiety, and turgescence of countenance; difficulty and pain in swallowing; unquenchable thirst; flow of saliva or mucous fluid; enlargement of sublingual glands; swelling and tenderness about the throat and beneath the lower maxilla; thickness of speech; peculiar voice, pain, redness, swelling, and occasionally protrusion of the tongue and great enlargement of the papillæ; the tongue is more frequently *protruded* from the mouth in the sympathetic forms proceeding from the excessive use of mercury, when the simultaneous affection of the tonsils, parotids, and parts in the vicinity, and the consequent tumefaction of them, press the organ outwards (in proportion to the swelling are the functions of the organ impaired, and in severe cases the voice and speech are much affected); indentation of its edges from the teeth; viscid exudation on its anterior surface. The swelling is best marked towards the base of the tongue and at one side only; the swelling occasionally prevents the epiglottis from rising, and fills up the mouth and isthmus faucium so as to threaten suffocation.

At the commencement the sense of taste is very acute, owing to the excited state of the nerves and increased vascularity of the papillæ; but as the disease proceeds taste is par-

tially destroyed, owing to the pressure on the nervous fibrillæ from the turgid vessels and fluid effused into the structure of the organ, and partly to the thick mucus or lymph covering the inflamed surface.

Inflammation of the tongue may terminate in resolution, suppuration, suffocation, or sphacelation.

Abscess in the tongue is said to be rare, owing probably to the muscular structure of the organ. In consequence of the effusion of lymph into the substance of the tongue considerable *hardness* and enlargement sometimes remain long after the acute stage of the disease has been subdued.

N.B. Protrusion of the tongue prevents dyspnœa, as it allows the tongue to remain open.

Treatment.—Leeches to the upper surface of the tongue (the organ having been previously well dried); the bleeding from the leech bites to be encouraged by the patient washing out the mouth frequently with warm water; punctures with a lancet beneath the tongue (Velpeau speaks of puncturing the ramid veins); the administration of a purgative and an antimonial mixture when the inflammatory symptoms are high. If the case has not been seen in its early stage, and the symptoms are urgent, no time should be lost in making a free and deep longitudinal incision at either side of the raphe, commencing sufficiently *backwards*, and keeping the edge of the bistuory parallel with the septum to avoid the possibility of injuring the vessels. There is another caution necessary in incising the tongue—the œdema may so far involve only one side, as to cause the *lower* surface, which yields the more readily, to be turned directly *upwards*, in which case the incision made *above* passes into the tissues *normally inferior*. The hæmorrhage from the engorged organ is very considerable, and sometimes alarming to the patient and surgeon, but in the majority of cases it ceases very soon; if the patient be feeble a pledget of lint introduced into the wound will have the desired effect, and was resorted to in one of my cases. Pieces of ice, if at hand, would be of much service in such a case. I find incisions were first recommended by Job Meckren, in the year 1656. They never fail in affording a speedy relief when made sufficiently deep and far back. The incisions gape widely at the time, but in a few hours close, and appear to be mere scratches, and sometimes it is difficult to see them on the following day. I observed in one instance that the wound re-opened.

My friend (and former pupil) Dr. Usher of Tinahely, lately informed me of a case of glossitis which occurred in his neighbourhood; incisions were recommended, but the man refused to submit to the treatment, and died from suffocation.

In a case when the symptoms are too urgent to admit of waiting for the effects of incisions, tracheotomy should be performed without delay.

The patient's strength should be supported by beef-tea, milk, and other unstimulating nutritious articles of diet.

Dr. Henry Kennedy—Will you allow me to make one or two remarks on the cases reported by Dr. Croly. I am one of those who look upon true idiopathic glossitis as being extremely rare, and I am inclined to think that many of Dr. Croly's cases might be accounted for in a different way. It appears that some of the patients had suppuration in the neighbourhood of the tongue. This is known to be a very common state, and may probably have given rise to the condition which I think Dr. Croly has too readily concluded to be *glossitis*. I am perfectly familiar with such a state of the tongue, but I have never looked upon it as glossitis. There are several affections of the throat in which the tongue will not bear the slightest degree of pressure. It is swollen and excessively painful, and presents exactly the symptoms which have been detailed this evening. For this reason, I would be inclined to differ with Dr. Croly regarding several of the cases. I think, on the whole, the paper was one of great interest. I might mention, before I sit down, a single case which I recollect, and which came within the category of cases of the kind. A female was given a small quantity of mercury, and salivation resulted. The parts were all swollen, but instead of subsiding, the tongue got larger and larger, and eventually protruded out of the mouth more than two inches. No treatment was of the slightest avail in curing it, and the point of the tongue had actually to be cut off. The woman made a good recovery, though, during the time the tongue was protruding, her sufferings were such as nearly to cost her her life.

Dr. Croly—Might I ask if Dr. Kennedy had seen many cases of glossitis?

Dr. Kennedy—I have seen such as those you describe, but I doubt very much they were cases of true glossitis.

Dr. Croly—I am in a position to state that I saw six or seven, and that five of my cases were seen and so pronounced by Dr. Geoghegan, who has had much experience in the disease.

Dr. Fleming said that allusion having been made to his remarks on the subject in Mr. Croly's communication, he would be excused for taking part in the discussion. He fully endorsed the opinions advanced by the gentleman who had last addressed the chair as regarded accuracy of diagnosis; it is imperative. Doubtless, mistakes have been made, and glossitis has been assumed to exist where it did not. The several details specified in his monograph on the subject of "affections of the tongue" having been entered into, it would be inexcusable to trespass further on the time of the Society. Indeed, Mr. Croly has been kind enough to note them, and moreover has recorded the diagnosis and symptoms of glossitis in the accurate acceptation of that term. All surgeons are familiar with those serious subfascial inflammations often assuming the alarming character of "gangrenous cellulitis", destroying the septa of the fascia, investing the several muscles, and even extending to the submental locality, where the symptoms assume all the features already described, and so simulate glossitis. The tongue in such instances is not in the proper sense of the word the seat of glossitis, but the effects are equally destructive to life if free incisions be not made and tension removed, whereby that organ assumes its natural boundaries, and the larynx is freed from any interference with its functions. In the eruptive fevers of children, such as measles, scarlatina, and variola, the hospital surgeon cannot but bring to his mind cases which may be classed under those affections.

Dr. Banon—I recollect the discussion to which Dr. Croly alludes. It was a very interesting one, and ensued on the reading of his paper. There was one particular point that created a great deal of difference of opinion with regard to the preference to be given to tartar emetic or mercury in these cases. It was the opinion of several gentlemen that the tendency of tartar emetic on young children being to produce a very depressing effect, it should be used very cautiously with them.

Dr. Barton's paper has been unavoidably held over till next week.

ARMY MEDICAL DEPARTMENT.

Among the statistical reports for the year 1864 (which by-the-bye only came to hand in 1866), we find that the mean strength of white troops at home and abroad was 191,272, somewhat below the average of the aggregate strength for the last four years, which was 199,116·25. The number of deaths was 3085, and the average number for the last four years was 3498. The annual ratio per 1000 of strength for those admitted into hospital was 1119, the annual ratio for the last four years being 1216. The ratio per 1000 for the year of those who died and were discharged invalided were respectively 16·13 and 22·4. The figures for the four previous years 17·57 died and 23·76 discharged invalided, showing a very satisfactory diminution in the mortality and numbers of those invalided.

The Sanitary Report contains a most interesting and valuable paper by Professor Parkes, on hygiene for the year 1865. In it he enters very fully into the theories of the propagation of diseases by "unknown specific agents." After pointing out the facts that no cell or other "independent organization" can be discovered microscopically as carrying the infection, nor any cell growth be detected in the body, the learned Professor goes on to say, on the subject of the cattle plague, "that the virus may be living matter, though the particles have no organized form, but if so, we have still a very imperfect conception of the mode of the action;" and again, "that a discharge virulently contagious may contain no cell form, and the poison appear to reside in granular or formless particles." He gives his opinion that the simply chemical theory is improbable, and that our knowledge is no greater than it was before the researches which were instituted during the cattle plague,

as to the true nature of the virus. In noticing separately the specific diseases, he clearly traces the last cholera epidemic from Alexandria (where it was carried by the pilgrims from Mecca), along the line of commerce, from port to port of the Mediterranean, and finally from Gibraltar to Southampton. We also have very forcibly given the advantages which accrued from the destruction of the stools in the limitation of the epidemic. We recommend the article to the study of all those who have a liking for epidemiological research.

Among the papers in the medical report we notice a very comprehensive article "On the Invaliding and Discharging of Soldiers," by Staff-Surgeon W. J. Fyffe, M.D., Assistant Professor of Medicine in the Army Medical School. It should be read by every assistant-surgeon, and all those who are about to enter the army medical staff. This section of the work also contains a short article "On the Use of the Bromide of Potassium in Cases of very Tight Stricture of the Urethra," by Assistant-Surgeon Lane. We have obtained good results from this salt in cases of irritation of the urethra from other causes, and we think it worth a general trial for the class of case, for which it is advised by Mr. Lane.

The amount of knowledge to be obtained from the perusal of the Reports is very great, and we consider the value of the information contained in them increases year by year.

Reviews.

LECTURES ON THE STUDY OF FEVER. By Alfred Hudson, M.D., M.R.I.A., Physician to the Meath Hospital. 8vo, pp. 336. Dublin: M'Gee. 1867.

In the preface to this work Dr. Hudson makes a statement which is unfortunately so true that it amounts to an undisputed aphorism, "that the student usually has a less clear idea of fever than of any disease which he meets with in the wards of the hospital." "This difficulty," adds Dr. Hudson, "may arise partly from the want of correspondence of the particular case before him with the description of some form of fever from which he has obtained his *ideal*, and partly from his not possessing the key, so to speak, to its solution in a knowledge of fever in the abstract, of its laws, and of the phenomena which are common to all types of the disease." Accordingly we find that Dr. Hudson's object in the present work is to furnish the student with a guide to his bedside analysis of each case, by treating of febrile phenomena in succession; first, generally or abstractedly, and secondly, in relation to each form of the disease. Beside an introductory lecture delivered at the Meath Hospital in 1864, we have fifteen other lectures, and an appendix, on fever. We have fever considered as one of the group of morbid poisons; a lecture on predisposition; one on the exciting causes; and another on the pathology and symptomatology of fever.

With regard to examining the pulmonary and circulating systems in fever, and to a peculiar form of pneumonia described by Dr. Stokes as occurring in that disease, we find an honourable recognition of the discoveries and labours of Dr. Hudson's most eminent colleague, Dr. Stokes; and this leads us to remark that it is a great pity that, except in a pirated and most incorrect American edition, Dr. Stokes's valuable lectures on fever are inaccessible to the profession. We sincerely hope that Dr. Stokes will do himself tardy justice in this matter, and confer a lasting benefit on the profession by having his lectures on fever published by his own authority in this country.

Dr. Hudson's Lecture VII. treats of the condition of the digestive organs in fever; and is followed by Lecture VIII. on changes in the different secretions. Lectures IX. and X. discuss cerebro-spinal lesions in fever; and Lecture XI. treats of epileptiform convulsions after crisis. Lecture XII. opens another view of the subject, and speaks of the diagnosis of fever as an essential disease. Here we may observe that Dr. Hudson, like most modern writers, regards typhus and typhoid as essentially different; and in the appendix he singles out Dr. Henry Kennedy as the most prominent advocate of the contrary view, gives a fair analysis of that gentleman's opinions on this point, and combats his deductions with a vigour which is quite refreshing, especially as it is pretty certain to be reciprocated in Dr. Kennedy's next *brochure* on fever. Lecture XIII. describes the history of the disease; its complications; effects of treatment; and prognostic signs at the period of crisis; and Lectures XIV. and XV. travel the round of principle and practice in the most important matter of *treatment*. Dr. Hudson warns the student and practitioner against the possible supervention of perforation of the intestine in typhoid; and observes that, perhaps more cases of perforation occur during convalescence than during fever, and then when least expected. In Lecture XV., speaking of the possibility of *arresting* fever, Dr. Hudson says:—"I believe that hundreds of cases of fever have been thus arrested, chiefly by three measures which medical fashion—rather than reason or experience—has long since consigned to comparative neglect. These are blood-letting, emetics, and cold affusion." Further on, Dr. Hudson condemns the attempt to arrest fever by purgatives; gives specimens of the fearful treatment to which fever patients used to be subjected by being purged *secundem artem*, and concludes by observing: "I have no hesitation in saying that you should never attempt to arrest or shorten fever by the exhibition of purgatives." We certainly think this good advice; and they only who know to what extent purging in fever is still practised throughout Ireland, can properly understand the force of Dr. Hudson's remarks. We knew a fever hospital physician who was a great light in his day, and whose almost invariable rule was to give each fever patient, on admission to hospital, the modest dose of two scruples, then forty grains, of calomel, and a plentiful libation of senna draught after it. We also were acquainted with another who knew nothing at all about such things as ulceration of the intestines in fever; and who accordingly "kept the bowels well opened," until, in not a few cases, the King of Terrors put a stop to the patient taking physic. We cannot see, however, that Dr. Hudson is logical about not arresting fever by purging. Among the objections to the practice raised by him is this, "that there is, perhaps, no instance known of fever being arrested by purgatives." Does not this statement beg the question at issue? For verily the purgers of past days affirmed and believed that hundreds of instances of arrest of fever by purging were to be had; and on this knowledge they based their support of the practice, just as Dr. Hudson now advocates blood-letting and tartar emetic to arrest fever in certain cases, against the views of Sir Thomas Watson, Dr. Todd, and others. The arguments of these physicians he disposes of in a way which seems to us conclusive, according to parity of reasoning, when applied against himself on the question of arrest of fever by purging. We fully agree with Dr. Hudson's views as to the arrest, or proposed arrest, of typhus by purging; but we think Dr. Todd's argument holds good, and that while, in given cases, of which it may be most probably predicated that they are cases of typhus, blood-letting and tartar emetic may, and purging may not, arrest the disease; yet as the late eminent London physician wrote: "If you deal candidly with yourself and others, you must not affirm that you can cut short and cure typhus unless you have the most unequivocal evidence that the cases in question have been examples of that disease."

Dr. Hudson does not share in Sir D. Corrigan's rejection of opium in typhus; but he thinks that chloroform may at times be judiciously substituted for it, and he strongly applauds the late Dr. Graves's well-known plan of treatment by tartar emetic, whether with or without opium.

There are two points in Dr. Hudson's work which we think are especially worthy of imitation by medical writers in the present day. One is the practice, which he has adopted in most of his lectures, of giving a summary of his conclusions on points of doctrine at the close of each discourse; and the other is the frequent references to the writings of other men in the same line. To the opinions and labours of men who are very much his own juniors he pays a respect, and gives a recognition which cannot fail to bring its own reward. For these, among other reasons, Dr. Hudson's book will hold its place as a medical treatise of value, and we hail its publication as another witness to the vitality of the Dublin School, which now, as in the early part of the present century, gives the medical profession of the Irish metropolis a world-wide reputation.

THE TROPICAL RESIDENT AT HOME. By EDWARD J. WARING, M.D., Author of "A Manual of Practical Therapeutics;" "An Inquiry into the Statistics and Pathology of some Points connected with Abscess in the Liver," &c., &c. London: John Churchill and Sons.

THE above little work will prove a most invaluable guide to all who have spent a portion of their lives in India or the Colonies, intending to pass the remainder of it at home, whether they have already returned here, or have such a step in contemplation.

Letters are not, as a rule, the most desirable pieces of literary composition to publish in book form; but we may make exception of the volume now before us, and think the author has done good service by publishing what were originally designed for a "few friends." Those who think of finding anything new in tropical life or home pursuits, detailed in the present volume, will be disappointed; while the casual reader will probably be tempted to pronounce it as exceedingly dry—but to neither of these does the author appeal. "Those whom these letters concern" will find much to interest them, and by perusing each carefully, will find a great deal of information which cannot be otherwise than useful. As surgeon in the Indian Army, much experience of tropical life must have been gained, and how far the usages incidental thereto are applicable to England, none can probably speak with greater certainty than Dr. Waring.

Those portions of his letters which treat on matters relative to hygiene—tropical diseases, &c.—deserve particular attention; and his hints on drainage, choice of residence, dress, diet, &c., show how deeply he has dived, even to the minutest particulars, in search of information, which, if followed, will assuredly not cause disappointment to "The Tropical Resident at Home."

A PRACTICAL TREATISE ON THE PHYSICAL EXPLORATION OF THE CHEST, AND THE DIAGNOSIS OF DISEASES AFFECTING THE RESPIRATORY ORGANS. By AUSTIN FLINT, M.D., Professor of the Principles and Practice of Medicine in the Bellevue Hospital Medical College, Fellow of the New York Academy of Medicine, &c. Second edition, revised. Pp. 590. Philadelphia: Henry C. Lea. 1866.

THE first edition of this work was published in 1856, and during the time which has since elapsed the author has, as he states in the preface, continued to devote special attention to the diagnosis of diseases affecting the respiratory organs, and he has also given daily lessons in auscultation and percussion at the bedside. For Dr. Flint very justly considers that all written descriptions of the phenomena observed by auscultation and percussion must be imperfect, and that the only method of making the student practically acquainted with the sounds elicited from the chest is by systematic bedside teaching, and he describes the plan pursued by himself in the instruction of his classes. He limits the number of each auscultation class to fifteen, and after explaining and illustrating the acoustic distinctions expressed by the terms intensity, pitch, and quality, he successively introduces the students to patients on whom percussion and auscultation are practised, and from whom each student may learn the distinctive sounds. Premising this observation of the necessity of each student and practitioner making himself personally acquainted with auscultation and percussion, we may state our honest opinion that Dr. Flint's treatise is one of the most trustworthy guides which he can consult. The style is clear and distinct, and is also concise, being free from that tendency to over-reqirement and unecessary minuteness which characterises many works on the same subject. The very attempt to describe with perfect accuracy in words the differences existing between the percussion notes, and between the various auscultation sounds, is a matter of great and almost insuperable difficulty, as each writer or observer has perhaps a mode of appreciating sounds, such as is peculiar to himself, and which he may fail to communicate to others. Hence it is essential that authors should agree, as far as possible, upon certain broad principles which may be generally intelligible, and that minute subdivising should be avoided rather than encouraged. It should be mentioned, however, that one of the chief features in Dr. Flint's treatise is the description of the characters relating to the *pitch* of the sounds, in conjunction with their intensity and their quality, as he believes that by attention to this point many difficulties of diagnosis may be cleared up, as, for instance, between the pectoriloquy arising from a solidified lung and that which denotes a pulmonary cavity.

Those who are acquainted with the plan of Dr. Flint's treatise may be informed that after an introduction referring to some preliminary points relating to the anatomy and physiology of the respiratory apparatus, he divides his book into two parts, one describing the different modes of physically exploring the chest, and the other the diagnosis of diseases affecting the lungs.

ELEMENTS OF CHEMISTRY. By WILLIAM ALLEN MILLER, M.D. Part 3: Organic Chemistry. Third Edition. Longman, Green, Reader, and Dyer, London. 1867.

BY the publication of this part Dr. Miller completes the third edition of his important work—an edition written in conformity with the modern ideas of chemistry, of which, however, the author was not an advocate some years since. We are consequently glad to see his adoption of these views, as it is self-evident that such would not have been the case until after a careful examination of the state of chemistry, and a conviction upon the author's part of the necessity of a radical change.

Dr. Miller, in his preface, says: "The most important changes in the present edition consist in the adoption of a new form of notation, and a recurrence to the system of nomenclature introduced by Berzelius. . . . . The general method of classification adopted by that eminent chemist, M. Gerhardt, *Traite de Chimie Organique*, excellent as it is, is not, however, well adapted to the plan of a didactic work like the present, and it was judged preferable, after a preliminary sketch of the methods of investigation and classification employed, to commence the detailed description of the products of organic chemistry, with that of a few of the best known and most familiar compounds derived from the vegetable kingdom."

We could have wished that the author had not adopted the meaningless, barred symbols, to denote equivalents that are doubled. These superfluous hieroglyphics have never been used to any extent in this country, and they are, in our opinion, a mistake.

The table to illustrate the arrangement of compounds in homologous series (p. 41), and other analogous tables, are freely scattered through the work. Dr. Miller is very fond of tables, and very useful they are; many of them will be found quite original in design, and invaluable for the lecture theatre.

The author commences by saying that it is important, *in limine*, to draw a clear distinction between organic compounds and organized bodies. The first class includes such compounds as sugar, oxalic acid, urea, quinia, &c., and are often spoken of as the proximate principles of animal and vegetables. Many of them may be obtained from organic bodies by synthesis.

On the other hand, organized bodies, such as muscular tissue, nervous structure, cellulin and ligneons fibre, never exhibit any tendency to crystalline arrangement, but show a rounded vesicular or fibrous configuration, and are so connected with each other as to form part of a system, each of which is incomplete if severed from the remainder. Bodies such as these cannot be prepared synthetically. The study of the chemical changes that occur during such transformations (the living body assimilating fresh particles. and arranging them in a special form) constitutes physiological chemistry. The author, after dwelling upon this subject for some time, proceeds at once to organic analysis (proximate and ultimate), which forms a fitting introduction to the subject of organic chemistry. In this chapter will be found a description of Mr. Warren's arrangement for fractional distillation, and many novelties and refinements of this branch of practical chemistry. It is here that refinement in apparatus and manipulation is so necessary.

From this the author proceeds to consider the theories on atoms and molecules, chemical types, polyad (polybasic) elements; the latter introducing a description of Crum Brown's graphic formula, lately brought so prominently before the scientific world by the writings of Prof. Frankland. The author does not use this graphic formula, however, any further than a description. As evidence of this edition being completely re-written up to the day, we need not go further than page 64, where the equivalency of thallium is under consideration. The voluminous and important notes would be witnesses of the care which has been bestowed upon this book if others were wanting; but as a rule, voluminous notes are not desirable, and in the present case they might have been often brought into the text with great propriety—*e.g.*, in treating of the amido-acids, the author gives, in the form of a note, a considerable paragraph descriptive of M. Greiss' azotised

bodies produced by the action of nitrous anhydride upon amido-benzoic acid, and such like bodies.—*Vide*, "On a New Class of Compounds containing Nitrogen," &c., P. Griess, *Journal of the Chemical Society*, January, 1867.

The author then goes into the consideration (under the happy term of chemical metamorphoses) of the changes that would come under the designations of oxidation, reduction, and substitution (including double decomposition). The parts devoted to ferments and the artificial bases are most full and valuable.

At page 492, he gives M. Stas' well known process for the extraction of the alkaloids from organic matter. Dr. Miller remarks that chloroform may be often advantageously substituted for ether in that process. The following bases being especially soluble in chloroform—viz., veratria, quinia, brucia, narcotine, atropia, and strychnia. Cinchonia is but sparingly soluble, and morphia still less so.

A peculiar phase of Dr. Miller's book is the manner in which practical or technical matter is inserted on every occasion in connection with the theoretical science. As an instance of what we mean we may give the receipts for different inks under the heads of gallo-tannates, Prussian blue, &c., and a very fair history of the preparation of snuff, as carried on in the Imperial Tobacco Works in Paris, under the head of nicotylia, preparation of leather, &c., &c.

Chap. XIII., "On the Nutrition of Plants and Animals," and Chap. XIV., "On Aomic Volumes, Atomic Heat, and Heat of Combination," bring the volume to a close. They may be received as some of the best constructed portions of this valuable and extensive work on "The Elements of Chemistry."

The Medical Press and Circular.

"SALUS POPULI SUPREMA LEX."

WEDNESDAY, FEBRUARY 6, 1867.

THE NEW BRITISH PHARMACOPŒIA.

THE new British Pharmacopœia is now in such a forward state that proof impressions of the volume have been sent to the Members of the Medical Council, and it will be printed and ready for publication in about another month. The statements contained in the *British Medical Journal*, professing to give an account of the contents of the forthcoming volume, are in many respects imperfect, and are, to say the least, premature. It was in fact impossible to describe the new Pharmacopœia, for the same reason as that given in the burlesque play in Sheridan's comedy of the "Critic," where one of the characters is explaining to another why he cannot yet see the Spanish fleet; "the Spanish fleet you cannot see, because it is not yet in sight." The British Pharmacopœia was not in sight—that is to say, it had no definite existence, even in proof, until Friday last, when it emanated from Messrs. Spottiswoode's establishment, and even now it is not in such a condition as to fit it for immediate publication, although, as we have stated, it will be probably ready in a few weeks.

We have been favoured with a sight of the book, and we believe that the alterations made since the appearance of the last edition will be found satisfactory to the Profession in the United Kingdom. A glance at the contents will show that all the objections formerly offered have been fully and judiciously weighed, and that many, and indeed most, of the recommendations made have been adopted. In the preparation of the Spiritus Ætheris Nitrosi, for instance, instead of the inefficient and absurd process recommended in 1864, a much more simple mode of obtaining the spirit is described. The objectionable plan of indicating the presence of opium in the names of many compounds has been altered, and the Dover's Powder, Paregoric Elixir, Opium Pill, and other preparations containing opium are again called Pulvis Ipecacuanhæ Compositus, Tinctura Camphoræ Composita, Pilula Saponis Composita, Pulvis Kino Compositus, &c.

The two compounds of mercury, lately called calomel and corrosive sublimate, are now called subchloride of mercury and perchloride of mercury, names which, we believe, are free from objection, and really represent, substantially, the chemical nature and relationship of those salts. Many well-known substances, rather arbitrarily excluded from the Pharmacopœia of 1864, have been restored, such as our old friends the acetum scillæ, the acetate of morphia, the iodide of lead, the syrup of buckthorn, the mistura spiritus vini gallici, and several others; and many new and valuable medicines have been added, such as the Calabar bean, the veratrum viride, the oxalate of cerium, sumbul, and many others.

With respect to the new chemical nomenclature now adopted by many scientific societies, it has not been either excluded or recommended in the new Pharmacopœia; but after the name of each chemical substance, both the formulæ are given, the old one first, and the new one side by side with it.

As we before stated, the Pharmacopœia cannot even now be considered in a perfect and complete state, and a few alterations, although probably of a minor character, may yet be made before it comes into the hands of the profession.

ENGLISH UNIVERSITY EDUCATION FOR MEDICAL MEN.

A PROPOSITION has lately been made at Oxford to establish a Hall for the exclusive use of Medical Students, and there are, no doubt, many arguments that might be used in support of such a scheme, but still when the matter is fairly considered, it will probably be found that the existing arrangements at the Universities, with some necessary modifications, would afford sufficient opportunities for the acquisition of medical study, together with other collateral advantages which the new plan would rather diminish than increase. Professor HUMPHRY, of Cambridge, has recently written a very sensible letter on the subject, and we think that his views will meet with general acceptance, although they are opposed to those which have emanated from the sister university.

In the first place, it must be observed that the majority of the Medical Profession can never be educated, as a great number of English clergymen are, at the English Universities. Unless the whole of the system pursued at Oxford and Cambridge were at once abolished, it would be impossible for the youths destined to the Medical Profession to obtain at either of those seats of learning a Medical Degree or Licence at twenty-one years of age, the time at which most young men expect to find remunerative medical employment. Those Universities insist, and we think rightly, that their alumni should go through a course of preliminary training in general science and literature, before proceeding to their medical studies, and this plan, while it ensures a somewhat higher degree of education, involves a considerably larger expenditure both of time and of money. Besides, it must be stated that residence at either of the English Universities, under any circumstances, is anything but cheap, and although it is true that some industrious students may be lucky enough to obtain Scholarships and other small helps towards their maintenance, yet the college bills always leave a large balance for the student or his relations to pay, and no amount of economy on his part can in any way reduce the items, which are sanctioned by the college authorities and are supported by ancient usuages. We entirely exclude the consideration of extravagance, to which college life, however, affords innumerable temptations, but the legitimate charges made for board, lodging, and tuition, are far greater than could be borne by most of those who design their sons for the Medical Profession, and the more especially when it is considered that a much longer time is required to take a Degree in Medicine than to qualify a candidate for Holy Orders. As soon as the student has taken his B.A. Degree he may in a few months, if of the proper age, and after a comparatively small amount of study, be ordained for the Church, whereas the Student of Medicine, after he has passed his B.A. Degree, has several years of study and large expenses still to encounter before he can practise his profession, and even when this object has been attained, he has, perhaps, to wait long before he gains any remunerative employment.

Thus there is no doubt that University residence is necessarily expensive, and especially so, for the reasons we have stated, in the case of Medical Students, but the University authorities are far from wishing to make it any cheaper. For the very fact of its being dear is one of its chief recommendations in the eyes of society in general, and especially of the upper classes, to whom money is no object, and so long as gross extravagance and vice are discouraged and discountenanced, the parents of most pupils find no fault with the charges, and the increasing demand for accommodation at both the Universities proves that the advantages they hold out are not unfairly paid for by the prices they command. In the case, therefore, of Medical Students, the very poor ones will never think of resorting to the English Universities at all; those who are likely to obtain early employment will grudge the time which they must spend in preliminary studies; and those who do enter are either in easy circumstances, or they can afford to wait some years before entering into practice. Now, these latter form the very class for whom the Universities hold out real advantages, and not so much from the encouragement afforded for the acquisition of scientific knowledge as from the collateral and social benefits obtainable by a University career.

The Medical Profession of the present day can perhaps hardly realise the enormous privileges formerly attainable by the Medical Graduates of Oxford and Cambridge. These favoured individuals formerly became, almost *de facto*, Fellows of the Royal College of Physicians in London, and were appointed, almost exclusively, to the medical posts at the London Hospitals, and thus they necessarily commanded an introduction into the best practice in the metropolis; and although things are now very much altered, yet it must be admitted that the associations formed at college are still found to be of the greatest service in after life. But the value of these associations in a great measure depends upon superior position in life of many of the parties thus thrown together, and all this advantage would vanish if the Universities were made cheap, or if the Medical Students were confined to a single hall, where they would in a measure be cut off from the rest of their fellow-students, and compelled to associate only with their own class.

Dr. Humphry very justly observes that there are Colleges enough already in the two English Universities, and instead of adding another, that the best mode would be to render the existing institutions more available to the wants of the Medical Profession, by such an extension of the teaching as may be most suitable to Medical Students, and by offering a fair share of honour and reward to those who distinguish themselves in Natural and Medical Sciences.

In reference to these last observations much more might be said, and if the history of the different Colleges could be fairly learned, and the present appropriation of the revenues could be examined, we believe it would be found that the authorities, in very many cases, have been very negligent of their duty in not providing rewards for Natural and Medical Sciences as well as for proficiency in Classics and abstract Mathematics, and it is only an act of justice to state, what we believe to be the fact, that several of the Medical Professors both at Oxford and Cambridge are labouring to remove this anomaly.

THE CASE OF HANCOCK *V.* PEATY.

In this case, which has lately occupied for some days the attention of the Divorce Court at Westminster, the petitioner endeavours to set aside a marriage on the ground that the lady was incapable of contracting such a bond in consequence of being insane at the time when the ceremony was performed. The petitioner was the lady's uncle, and one very curious point in the case is, that the married parties are themselves quite satisfied with their condition, and have no wish to change it, and are, in fact, opposing the suit. It is very difficult to understand why the case was brought forward at all, as the details are exceedingly painful, and there is not only no money to be gained on either side, but both parties must lose very considerably in the way of law costs, whatever the issue may be. Ineffectual attempts have already been made to arrange the matter privately, and in order to allow further facilities for such a course the proceedings have been postponed *sine die*, and we believe and hope that the public will hear no more of the suit. The remarks we make have reference only to the points in which our profession is concerned, and these certainly offer some salient marks for comment.

There is, in the first place, much of the usual contradiction of evidence as to the fact of the insanity, for while several of the witnesses, medical and lay, and some of the lady's relatives, positively testify that she was of unsound mind, others, including the husband, other of her relatives, her solicitor, and several more persons, all swear that she has always been perfectly sane, and she herself is now ready to be examined either privately or publicly to prove the fact. Dr. Robert Lee, who was called on her part, in support of the validity of the the marriage appears to attribute her mental condition to constitutional irregularities, and if he did not directly encourage or recommend the union, he offered no professional objection to it, thinking probably that the change in her condition might have a favourable influence rather than otherwise. It must be stated, however, that nearly all the rest of the medical witnesses, including some *experts*, positively considered her insane, and it is stated that attempts were made to dissuade her from marriage on that ground.

It turns out curiously enough, *apropos* to the recent controversy on clitoridectomy, that this poor lady has been an inmate of Mr. Baker Brown's establishment for treating the Surgical Diseases of Females, and it is stated that she there underwent an operation. In the evidence of the husband reported in the *Daily Telegraph*, that gentleman states, that the operation was performed without his consent or knowledge, and that he does not even now know its nature. As this part of the transaction has, we understand, attracted the attention of the Commissioners in Lunacy, we forbear from making any further remarks at present, the more especially as we anticipate that Mr. Baker Brown will offer a full explanation of the case to the Medical Profession.

Notes on Current Topics.

Scurvy.—Mr. Harry Leach, Resident Medical Officer to the *Dreadnought* Hospital Ship, has again addressed a letter to the *Times* on this subject in which he asks the following questions :—"If bad lime-juice be not provocative of scurvy, how comes it that cases are brought home several years in succession by the same ship, and that the worst cases of this disease are received from certain ports, where the lime-juice is known, and has been proved to be grossly adulterated. How comes it that scurvy will exist in several ships belonging to one firm?" We have already placed the subject before our readers, with an appeal to the sympathy of philanthropists and a remonstrance to the Legislature to interfere and put an end to this infliction. It will be the less necessary therefore for us to refer to it again. We may however observe, before dismissing the subject, that there is no surer sign of the state of a ship's crew than the existence on board of this disease. There must be some defect or some negligence, some shameful disregard to the welfare of the sailor. Bad food or defective lodgings, or both combined, or unwarrantable withholding of a cheap and simple remedy. Pure lime-juice undoubtedly is a specific for the disease, and will prevent the appearance of it in a vessel where the defective quality of the provisions and bad accommodation would be sure to produce it in the absence of that medical agent. Why, then, should not our authorities take measures to ensure to our seamen a supply of that article pure? Competent medical men might be appointed to ascertain that the lime-juice is of proper quality, and that it is properly shipped, and likewise to enquire into the circumstance of any death that may have taken place on the voyage.

Hospital Carriages.—A letter has appeared in the *Times* from Dr. Horace Jeaffreson, Hon. Sec. Hospital Carriage Fund, giving an account of the proceedings of the committee and what they have already done up to the present period in a matter of so much importance as an attempt to render it unnecessary to use the common street cabs for conveyance of invalids, who in certain cases are afflicted with contagious diseases which may be conveyed to the next persons who enter the infected vehicle. This is a subject well deserving the attention of the public generally, as no doubt disease has been unconsciously conveyed in hundreds of instances by this promiscuous employment of these public conveyances. It appears that the sum of £50 has been already subscribed, six hospital carriages have been procured at a cost of 100 guineas each. They have been distributed in the following manner :—The Committee of the London Fever Hospital have given permission to build a station on their grounds in the Liverpool Road for two of these carriages, one for fever, the other for small-pox ; all who forward telegraph messages to that address will find these carriages at their service at a very moderate charge for the hire of a horse which is the only

expense that those who use them need incur. The other four have been given to the London, St. George's, St. Mary's, and Middlesex Hospitals, and have been accepted by their respective committees, as all those institutions receive patients with infectious disorders into their wards. Coach-houses will be provided by them for the carriages, and all patients suffering from such diseases will be permitted to avail themselves of this mode of transit whenever they may need to be conveyed to or from these institutions. These committees also readily agreed to use their utmost efforts to carry out the objects contemplated by the committee of the "fund." We very much regret to find that the authorities of the Small-pox Hospital (an institution which ought to be one of the most prominent in giving assistance to an object of this kind) have, for some reason or other, not felt themselves at liberty to follow these laudable examples. We hope the restraint, whatever it be, may soon be removed and that they may not stand aloof from an object which equal to all others demands their approval. Appeal is made by the committee of the fund for pecuniary assistance, which is the more urgent; and as applications are constantly made for a carriage to place in this or that locality, and sometimes a coach-house is offered, but for want of further funds these applications are necessarily refused. There is everything in the construction of these carriages to render them convenient, to give ease to the patient and preserve cleanliness. They are fitted with vulcanized india-rubber air mattress and pillow, which, as well as the hard paint of the interior of the carriage, admit of being washed, and all materials which are found in common street cabs, and which might retain the contagion, such as lining and stuffing, are dispensed with. We trust the efforts of the committee may meet with speedy success, and that the time may not be distant when no vehicle in the public service shall be suffered to convey a person afflicted with any serious disease.

A New Food.—Mr. J. Hullett offers, through the medium of the *Times*, a few grains of the seeds of the true Chinese sugar-grass *(Sorghum Tartaricum)* to any one sending him a stamped envelope. It is a hardy cereal, and said to produce much more per acre than wheat, while the leaves furnish a valuable food for cattle. As some of our readers may be desirous of trying the cultivation of a new serial, we shall be only serving the liberal purpose of Mr. J. Hullett by adding his address, which is Clarence-lodge, Cosham, Hants.

St. Thomas.—The mail steamer *Seine*, which arrived last week, was detained at Southampton on account of some cases of yellow fever having occurred during the voyage, one of which had been fatal. This is not nearly so bad as the cases on which we have already quoted. The *Seine* brought an account of quarantine at Christmas which was of some interest, and her latest news speaks of the disease as rapidly disappearing. The total deaths had been 805 up to the 12th ult., on which day the *St. Thomas Tidende* thus writes :—

"The deaths from the malady by which we have been suffering have so considerably moderated within the last three days that we really think no one can hesitate to pronounce the disease as having ceased to be epidemic, and we should not be surprised that in a few days the authorities and the Board of Health would officially announce the disease to have ceased, with the exception of a few occasional poradics cases."

Bi-Centenary of the King and Queen's College of Physicians in Ireland.—The first Charter of this College was granted by King Charles II. on the 8th of August, 1667. Consequently the bi-centenary of that event will fall on the 8th of August in the present year, and will probably occur about the time when the British Medical Association will be in Dublin.—(See Belcher's Memoir of Dr. Stearne, Founder of the College.)

Change of the Mode of Medical Examination.—We understand that the King and Queen's College of Physicians in Ireland have resolved that at the quarterly class examination to be held in February, and at all future class examinations, the examiners shall each give a printed paper containing five questions, and also a *viva voce* examination of five rounds. This, in fact amounts to closely following the M.B. Examination at Dublin University.

Lady Doctors.—The example set by Miss Garrett is not without effect. Last week three ladies passed the Preliminary Examination in Arts at the Apothecaries' Hall, London, and will, we presume, now go through the curriculum required by that body. If we are to have regularly-educated female practitioners, we cannot regret that the Society of Apothecaries should be the Corporation to grant the licence, for there is no other which has striven more continuously to raise the status of the profession, nor in which we could place more confidence, as likely to act with impartiality in carrying out this attempt.

Small-Pox in London.—Since 1862 this disease has been on the increase in London, and at the present moment an epidemic is prevailing which may well excite alarm. This is well seen in the statistics of the Small-Pox Hospital, of which the annual meeting was held last Friday. In 1863 no less than 1537 cases were admitted. In 1864 the number fell to 836, to rise the following year to 1249, and last year to 2069. This is the largest number admitted in any year since the opening of the hospital 120 years ago. Nothing can be more conclusive as to the inefficiency of the Vaccination Act, as at present carried out. Amongst the unvaccinated the mortality in the hospital was nearly 40 per cent., while in the vaccinated it was less than 7 per cent. Such facts cannot be too frequently repeated.

Mortality of Scotland in the Cold Weather.—The mean temperature in the week ending January 26, in each of the eight towns of Scotland which furnish returns to the Registrar-General was :—In Glasgow, 34·6° ; Edinburgh, 33·6° ; Dundee, 33·4° ; Aberdeen, 33·0° ; Paisley, 33·0° ; Greenock, 34·5° ; Leith, 36·1° ; Perth, 32·1°. In the corresponding week of the year 1866 the weather in the same places is said to have been "as mild as if it had been spring—the prevailing winds been west and south-west." The differences in the mortality of the week in 1866 and 1867 are seen in the following official returns. Deaths in the two weeks :—In Glasgow, 359 and 204 ; Edinburgh, 107 and 93 ; Dundee, 70 and 49 ; Aberdeen, 46 and 46 ; Paisley, 48 and 28; Greenock, 32 and 38; Leith, 22 and 15; Perth, 21 and 11. Totals—705 and 514. The lowest temperature recorded at Paisley in the late frost was 15·2°. The highest 49·8° at Glasgow. The range of temperature in the week was 29·8° in Paisley, and 31·6° in Glasgow.

Residences of the London Poor.—This is a subject which has of late excited a great deal of attention. The altered condition of the city in consequence of requirements for mercantile and trade purposes, railroad extension, and improvements of various kinds, has driven large numbers to the suburbs, where they are thickly huddled together, in dwellings unfit for human occupation, both as it regards health and convenience of the lowest order. The investigation, though far from complete, of the Commons Select Committee of last session on the Local Government of the Metropolis, discloses a series of facts connected with the habitations of the poor which we shall endeavour to classify and present to our readers. In the district of Whitechapel, a member of the Board of Works states, that there are "5000 houses in courts, alleys, and small streets, which require to be constantly inspected in consequence of the disregard to cleanliness among the inhabitants, and if the places are made decent they are soon again found in a most filthy state. How far degraded habits may have been produced by the miserable abodes they have been compelled to live in it is difficult to say. The Medical Officer of Newington seems to think that these things have a reciprocal bearing, and that, as a rule, the better the residence the cleaner and more decent the tenant; and it is a fact, that if the lower classes of Whitechapel are perseveringly dirty, their houses in great part are unfit for human dwellings, without proper ventilation, built back to back against a dead wall or towering warehouse, situate in courts with no thoroughfare not above three yards wide. In the parish of St. George's, Southwark, the same state of things is found. The Vestry Clerk says:—"Many of the houses in this parish are so built as to be unfit for habitation, and many of the courts are such, that they would be injurious to life, whether over-crowded or not." And again, "there is no room in the yard for a dust-bin, and the people throw the refuse into the street for the scavengers to take away." A vestry man of St. Pancras speaks of houses there built in such narrow courts and passages, that they never could be wholesome habitations, and he considers that it would be for the public good to take them down. In some neighbourhoods a huge nuisance exists. In a confined district in St. George's in the East there is large dust yard, and if an order is obtained for the removal of the dust a mass of seven or eight hundred tons cannot be cleared off at once, and there it lies in hot weather, fermenting, offensive, and dangerous, day after day. In others there are objectionable manufactures which it is almost impossible to get rid of, all interfering more or less with the salubrity of the humble dwellings around. Who can wonder in such a state of things that disease and death should commit their ravages among those unhappy beings who are driven there for shelter. Who can wonder at fevers and epidemics of different kinds in such localities as these, and the insufficiency of every effort to counteract the infection. On fever breaking out at Rotherithe, the clerk of the local board tried the only remedy open to him—viz., closing the houses; but before he could get the order from the magistrates, the fever spread through the district, and the curate and a relieving officer fell victims to it. We have confined ourselves to the places visited by the Commons Committee, though it is well-known that the evil exists more or less all round London. The longer it is neglected the more it will increase, and the difficulties of remedying it increase as well. What then will the metropolis do? Efforts are made in every direction to lessen the calamities which are occurring around us. The city has never been backward in generous acts, or devising means of improvement, and we entertain the hope that it will ere long turn its attention to this gigantic evil.

Vivisections in France.—A very temperate letter on this subject appears in the *Times* from the pen of Dr. Markham, who, since his recent appointment, has resigned the editorship of the *British Medical Journal*, which he for some time conducted with great ability, and the gentlemanly tone of which, whilst editor, he consistently maintained. The letter just mentioned is just such as might have been expected from Dr. Markham. It deprecates the use of immoderate language in any communications that may be made from this country as only likely to frustrate the very end proposed, and points out the objectionable manner in which on a former occasion the London Society proceeded to denounce the practice. The following paragraphs from Dr. Markham's letter are well worth attention:—

"One point, however, in the report is, as a caution in future proceedings, worthy of especial notice. I am sure you will agree that moderation in language should be carefully practised by those who attack these doings. That our French *confrères' susceptibilité*, was deeply wounded by the terms used in the documents above referred to as laid before them is manifest in their report. The committee of the Academy there very naturally object to phrases like the following cast at them:—'Inhuman and revolting practices,' 'outrages upon nature and upon God,' 'violation of all Christian principles.' 'We are told' (runs the report) that 'experimenters wear the hypocritical mask of science as an excuse for their atrocities; that they prolong vivisections to satisfy their infamous pleasures; that they practise infernal brutalities, which should be held up to the execration of the whole world,' &c.

"We can hardly hope to bring the Academy into a happy frame of mind for calm discussion by introducing the subject to their notice after this fashion.

"If, therefore, we again appeal to that learned body, let us address them in rational and scientific language, and not allow the negotiations to be marred by sentimental amenities of the above description.

"It is certain that the injudicious attacks hitherto made against French veterinary practices have injured instead of advancing the cause of humanity."

DEPUTATION OF THE HARVEIAN SOCIETY ON INFANTICIDE.

On the afternoon of Tuesday, the 29th ult., Mr. Walpole, Secretary of State for the Home Department, received an influential deputation of the Harveian Society, which was desirous of urging upon Government the necessity of some Legislative interference on this painful subject.

Dr. Tyler Smith said, the deputation from the Harveian Society sought to obtain a diminution of infantile mortality. A committee had been formed by the Society, and had resolved upon a series of recommendations for the consideration of the Government. The committee were of opinion that the following were the main causes of illegitimacy, and indirectly of infanticide:—1. The overcrowding of the dwellings of the labouring classes in urban and rural districts; 2. The custom prevailing in the North and West of England, and in Scotland, of public hiring of servants; 3. The gang system of agriculture; 4. The promiscuous lodging of the sexes during hop-picking, harvests, cider-making, &c.

Dr. Drysdale read the recommendations referred to.

Dr. Smith explained that their proposal was that the registration of all births should be compulsory, believing it would

greatly lessen the facilities of infanticide if a registration of still-births could be demanded. Then they considered the temptation to infanticide would be diminished by taking the chief of the burden of maintaining the child, and by dividing it between the father and the mother; for at present, in the case of an illegitimate child, the great burden fell upon the mother, and the person really sacrificed was the child. Next they proposed that the crime of infanticide should no longer be punishable by death, but that the recommendation of the Royal Commission on Capital Punishment be adopted, and that the offence be considered as murder in the second degree. This mitigation of capital punishment would seem to make the law less severe; but the wish of the Society was really to make it more severe, and with the difficulties which juries now experienced in convicting a mother on this charge they believed that if the punishment was made less it would reach the mother much more certainly and frequently. Further, they proposed to give the child the protection of the poor-law. Instead of leaving it to the mother to obtain assistance at the hands of the law from the father, they wished to give the poor-law the onus of reaching the father, who often escapes from the want of means on the part of the mother to support her case. The committee considered the maximum sum which may be assessed on the father of an illegitimate child should be raised from 2s. 6d. to 5s. a-week. They had also devised a system for the registration of nurses. At the present time nurses taking illegitimate children were so incompetent that it was rare for such children to reach maturity. The mortality of illegitimate children reached 70 to 75 per cent. The committee believed this might be diminished by providing penalties against any taking illegitimate children to nurse who are not duly registered; by restricting the charge of more than two children by one nurse; in short, to keep up an efficient registration and medical supervision of all wet-nurses and dry-nurses. The Society had recommended the prohibiting of children being congregated together, because it was seen that in that case they never thrive, and they would be better taken care of if distributed among a number of persons.

Mr. Walpole—Legitimate as well as illegitimate?

Dr. Smith—Yes.

Mr. Walpole—What do you attribute that to?

Dr. Smith replied, to various causes—to more care being taken of them, better ventilation, and then diseases of children were so many of them contagious.

Mr. Walpole—Do you recommend the alteration of the law in both cases?

Dr. Smith said not. The business of the committee was more with the illegitimate than the legitimate. Besides, the mortality among legitimate children was not so large as among the illegitimate. The committee also laid stress upon giving the mother the power to remain with her child in the workhouse during the four months after confinement; for it was proved that nothing could compensate for maternal care during the first few months of infancy. They wished to give her power, after the four months, to leave the child in the workhouse, the guardians having the power to recover from the mother a portion only of the sum required for its maintenance. They, moreover, suggested that for the rearing of children left in charge of the guardians a colonizing system should be adopted similar to that pursued by the Foundling Hospital and to that followed under the old poor-law system. In conclusion, Dr. Smith said the committee hoped some of their conclusions would be expressed in legislation. It was their belief that public morality would be thus improved; that crime would be prevented and punished; and that a saving of infant life would take place, especially of illegitimate infant life.

Dr. Pollock observed that the committee proposed that there should be such a system of surveillance over mothers of illegitimate children as to diminish their temptation to infanticide.

Mr. Brendon Curgenven remarked that the mortality of legitimate children averaged from 24 to 30 per cent. as against 70 to 75 per cent. illegitimate. There were certain districts—such as Paddington—where the mortality was even greater. With regard to the suggestion of the committee, that the establishment of foundling hospitals for the free and indiscriminate admission of infants would be attended by bad results, he stated that statistics showed that out of 14,000 admitted to six foundling hospitals, 1000 died. That was owing to the children being taken away so soon as three or four weeks from the mother.

The Home Secretary, having listened to the remarks the deputation had to offer, said the only thing he need say now with regard to any legislation on the subject brought before him was that a Bill, based upon the recommendations of the Capital Punishment Commissioners, would be introduced in the forthcoming session of Parliament. He could promise the deputation no more legislation beyond that without giving the subject much more consideration; but he should be obliged by any statistics with which the committee could furnish him.

Dr. Smith assured the right hon. gentleman the committee would provide him ample statistics on the subject, and, having thanked Mr. Walpole for his patient attention, the deputation withdrew.

REPORT OF THE DISEASES PREVENTION COMMITTEE OF THE CITY OF LONDON UNION.

From the final report of the Diseases Prevention Committee of the City of London Union, we learn that 1547 cases of diarrhœa, and 23 cases of cholera, occurred during the weeks ended from July 28th to December 15th—the number of deaths from cholera being 28, and those from choleraic diarrhœa 19. The daily returns were sent to Dr. Sedgwick Saunders, under whose superintendence the house-to-house visitation was carried on.

Dr. Sedgwick Saunders has presented to the Committee and to the Board of Guardians of the City Union, his report on the late epidemic of cholera, which has just been printed. It commences by saying that the experience of the Medical Officers employed in the Union has confirmed

"The conviction that the early treatment of diarrhœa cannot be too strongly insisted upon, as there is much reason to believe that this so-called *disease* is often an early *symptom* only, and must be looked upon as an essential premonition of the choleraic incidence; so that many cases treated successfully as diarrhœa ought, nosologically, to be classed under the head of cholera cured in its early or premonitory stage. This admits of no more direct *proof* than any other negative proposition; but analogy and experience justify the assumption—hence the advantage of searching out such cases by daily house-to-house visitation, and in this manner enabling the medical practitioner (by dealing with the disease at its inception) to arrest its degeneration into the more severe and less tractable phases."

It is found that the percentage of fatal cases was considerably higher than at the London Hospital or the Cholera Hospitals, on which Dr. Saunders remarks:—

"I attribute this to two causes—first, and chiefly, to the *culpable disregard of ordinary and well-established sanitary precautions* on the part of the Commissioners of Sewers in the neighbourhood in which the cases originated (as abundantly proved by the reports of your medical visitors in the published returns of their house-to-house visitation). And secondly, to the fact that your medical officers have carefully excluded from their returns all cases in which the characteristic symptoms of *true Asiatic cholera* were wanting; whereas in some of the published returns there is much reason to believe that fatal cases of choleraic diarrhœa have been registered as deaths from *cholera*."

Dr. Saunders considers that whether cholera be due to a poison in the air or water "*it ought never* to become *epidemic*." He examines both the water and the air theories evidently leaning to the former; and he expresses

a fear that we must abandon the hope of rendering impure water fit for drinking by any of the common processes of filtration through charcoal, boiling, or the use of Condy's fluid.

In connection with this subject, Dr. Saunders observes :—

"Another aspect of this very significant subject presents itself in connection with the question of the adulteration of milk. It is known that upwards of six millions of gallons of milk are sent into the metropolis from the country in the course of a year ; and this quantity is ever on the increase. Now it is familiar knowledge to all, that this so-called *milk* is largely diluted by the dairy farmers, before reaching its urban destination ; and the occasional use of a lactometer will convince the most sceptical of the enormous extent to which, by the fraudulent practices of the dairymen, water is added to make up the bulk required. The water so used must, from the very nature of things, be drawn from wells supplied chiefly by the surface drainage of country districts where manure heaps and cesspools abound ; and it requires no stretch of imagination to understand that, by this means alone, various diseases of the zymotic class may be conveyed from one locality to another. If we cannot get pure milk, the farmers should be at least taught that the sophistication which they now practise with impunity should not be the means of converting a commercial fraud into a sanitary crime.

"The only reliable and permanent remedy against the evils of retaining water for domestic purposes in improperly constructed, exposed, or filthily kept receptacles, will be the institution of the *constant* in place of the present *intermitting* service ; and until this is accomplished, we shall have frequent reason to complain of the injurious effects of retention upon the quality of the water so stored.

"In our recent house-to-house inspection, we found this to be almost universally the case ; the water was received into cisterns or water-butts, placed too often over common privies, or in other equally objectionable situations which afford a ready access to the noxious exhalation from neighbouring untrapped drains, dust heaps, &c., and for which there appears no other remedy than the "*constant*" supply. To obtain this inestimable boon, every opportunity should be taken to instruct the public upon the subject, in order that the necessary outlay may be submitted to. It is manifestly unfair to rail against the Water Companies for their endeavours to economize the commodity in which they deal, so long as the present indifference as to the commercial value of pure water (leading to a wasteful expenditure of the same) continues. At present, the daily issue for the whole of London is at the rate of thirty gallons per head of the entire population, whereas it is computed that one-third of that quantity might be saved if well-known mechanical appliances were adopted by which the amount used by each consumer could be accurately measured, like our gas, and paid for accordingly."

Dr. Saunders strongly advocates the employment of Medical Men as Sanitary Inspectors. He would have each District Medical Officer of the City Unions appointed Assistant Officer of Health, and we believe his plan to be both feasible and desirable. The Commissioners of Sewers have appointed four additional Inspectors, but, observes Dr. Saunders, with not unmerited severity :—

"I regret to report that these Inspectors have been so entirely unfit for such appointments ; and I can anticipate nothing but a repetition of disastrous oversights, against which I have previously had occasion to inveigh, so long as the Commissioners of Sewers persistently reject a proposal long since made to them by competent persons, chosen from the same class of men who have heretofore proved and recently impressed upon them by a member of their own body : that these inspectorships should be conferred upon properly qualified medical men, who alone are capable of estimating the sanitary requirements of the several districts in which they are daily working. The remedy is so simple and facile of accomplishment, that every well-wisher of our great city must regret to find a body of men individually sensible and practical, assuming in their collective capacity an infallibility of action, and treating with supercilious disdain any suggestion originating from without the circle of their corporate existence."

There are many other interesting points discussed with ability in the reports which we have thus analysed, but to which we have not space to refer. We quote the concluding paragraph of Dr. Saunders, on account of its containing a warning we have more than once expressed :—

"In conclusion, I desire to express my earnest conviction, founded upon a diligent examination into the history of previous epidemics, that the cholera has not yet left this country ; and, judging from the erratic course it has taken on the Continent, in Egypt, and elsewhere, I may almost venture to predict that it will become active again in the coming spring, if, indeed, it does not appear before. Week by week we may watch its presence still amongst us; and when we remember the numerous exciting causes still in existence and surrounding us (to our shame as a nation), that man must be bold indeed who would relax the smallest effort for its extinction."

LONDON WATER SUPPLY.

We find in the Registrar-General's report for last week an account of the quantity and quality of the water supplied to the inhabitants of London by the several water companies. Nine companies state that during the month of December they supplied an average quantity of a cubic metre, or nearly a ton of water *daily* to each house. Professor Frankland has furnished a careful analysis of the waters for the month of January with the following results :—

Companies.	Number of Houses supplied in December, 1866.	Average Daily Supply of Water in Gallons during the Month of December, 1866. (See Note.)	Solid Matter in 100,000 parts of the Waters.	Organic and other Volatile Matter included in Col. 4.	Amount of Oxygen required for oxidation of Organic Matter.	Total Hardness.
Thames.						
Chelsea	26,783	7,786,200	31·34	2·39	·0532	18·5
West Middlesex	36,331	7,872,706	31·99	2·33	·0532	18·8
Southwark and Vauxhall	73,940	13,130,500	32·42	2·56	·0532	18·8
Grand Junction	26,450	8,650,150	32·82	1·28	·0597	19·4
Lambeth	37,165	8,819,100	31·88	2·32	·0597	19·4
Other Sources.						
Kent	33,693	6,149,006*	39·40	1·22	·0223	22·5
New River	112,852	21,621,000	31·39	0·69	·0432	19·4
East London	90,174	19,842,000	35·68	2·64	·0727	20·5
South Essex†	910	183,497	37·93	3·02	·0140	22·2

Note.—The water includes the supply for manufactures and for various purposes other than domestic consumption. Total number of houses supplied, 438,298; average daily supply of water in December, 1866, 94,054,159 gallons. This return, as compared with that for the previous month, shows an increase of 160 houses and a decrease of 1,002,995 gallons of water supplied daily.

* Erratum.—Return No. 51, 1866.—For 5,503,833 gallons, read 6,503,833 gallons.

† The secretary to the South Essex Waterworks Company, writing in October, 1866, states :—"We have not extended our mains at present west of Romford." In other words—not to London.

The table may be read thus :—100,000 lb. of Chelsea water contained 31·34 lb. of total impurity, of which 2·39 lb. were driven off by incineration; 0·0532 lb. of oxygen was required to oxidize the organic matter. Of the solid residue, 18·5 lb. were carbonate of lime, or its equivalent of hardening salts.

The fourth column of this table contains the amount of solid matter left on evaporation and desiccation at 120° — 130° C. (248° — 266° F.) The results are recorded in 100,000 parts. By moving the decimal point one place to the right the above figures express in milligrammes the quantities contained in one kilogram of the several waters.

The whole of the waters, with the exception of the New River Company's, were slightly turbid when drawn from the companies' mains ; the Kent and South Essex Companies' waters contained in suspension a quantity of white flocculi.

THE WEATHER AND THE PUBLIC HEALTH.

The Registrar-General's returns for the week ending January 26th fully justify our prognostications in reference to the probable continued influence of cold upon the death-rate. We have to add 239 deaths in excess of the average to the 732 reported as killed by the cold in the previous fortnight. If we turn to the reports from the large towns we find in all that the mortality has been increased during the cold weather, the annual rate of mortality having risen to 35 per 1000 persons living.

So many important points are discussed in this week's returns that we transfer the following paragraphs to our columns :—

"The deaths registered in the last three weeks ending the 26th of January amounted to 5485, while the deaths of the three preceding weeks ending the 5th of January amounted to 4250; and the difference is 1235. Now, the mean temperature of the three cold weeks ending 29th of December, 42·9°; leaving a difference of 12·7.°* So every the 19th of January was 30·2°; of the three mild weeks ending the degree of depression over three weeks corresponded nearly to 100 deaths in London. The excessive number of deaths is thus distributed over five ages—164 at ages under 20, 123 at 20-40, 312 at 40-60, 531 at 60-80, and 105 at the age of 80 and upwards. When the deaths are compared with the numbers living at the corresponding ages, these results are obtained—to 100,000, persons living at each of the five ages the deaths were 12 at 0-20, 12 at 20-40, 56 at 40-60, 297 at 60-80, and 888 at the age of 80 and upwards. As age advances after childhood, the power fails of producing the internal warmth by which life is upheld. So while youth and vigour enjoy the frost, age and feebleness perish.

"The annual rate of mortality last week was 32 per 1000 in London, 32 in Edinburgh, and 43 in Dublin; 35 in Bristol, 28 in Birmingham, 41 in Liverpool, 48 in Manchester, 40 in Salford, 31 in Sheffield, 29 in Leeds, 30 in Hull, 43 in Newcastle-upon-Tyne, and 42 in Glasgow. The rate in Vienna was 30 per 1000 during the week ending the 19th inst. when the mean temperature was 6·1° Fahrenheit higher than in the same week in London, where the rate was 29 per 1000.

"At the Royal Observatory, Greenwich, the mean height of the barometer in the week was 29·652 in. The barometrical reading increased from 29·31in. on Thursday to 29·97 in. on Saturday. The mean temperature of the air in the week was 37·2°, which is 0·5° below the average of the same week in 50 years (as determined by Mr. Glaisher). The highest day temperature was 54·5° on Thursday. The lowest night temperature was 22·0° on Tuesday. The entire range of temperature in the week was, therefore, 32·5°. The three first days of the week were extremely cold, the three last mild. The mean of the highest temperatures of the water of the Thames was 32·8°; that of the lowest was 30·8°. The difference between the mean dew-point temperature and air temperature was 4·8°. The mean degree of humidity of the air was 82, complete saturation being represented by 100. The direction of the wind was variable. Rain fell to the amount of 0·35 in. On Tuesday at 7·30 P.M., the temperature then being 23°, a remarkable shower of rain commenced to fall, and the drops as they were deposited on the surface were instantly frozen. The temperature than began to increase; by 9 P.M. it was 25°, by 10 P.M. 30°, and by midnight 33°. Throughout the whole of this time occasional showers were noticed, and the surfaces on which the rain fell became thickly coated with ice. After midnight a very rapid thaw began. According to a return furnished by the engineer of the Metropolitan Board of Works, the average daily quantity of sewage pumped into the river Thames at the Southern Outfall Works, Crossness, was 57,865,359 gallons, or 262,909 cubic metres, equivalent to about as many tons by weight."†

Correspondence.

HEALTH RESORTS.

TO THE EDITOR OF THE MEDICAL PRESS AND CIRCULAR.

Sir,—Having seen in the last number of your valuable journal the review of a book on the climate and position of one of our English towns on the southern coast, I thought possibly a few remarks on those health resorts of the Mediterranean, to which so many, now-a-days, are crowding as the year draws to a close, might, perhaps, not be out of place in your columns. I beg leave, therefore, to send you a few facts derived from personal knowledge and observation while sojourning in various places in search of the inestimable blessing of health. Some years ago I was recommended, and strongly urged, by my medical attendant to pass the winter in the South of France. I took his advice, and followed it out for several successive winters, spending them at different places along the Riviera, between Marseilles and Genoa. I am free to confess that the climate there at that season of the year is different from ours in England, not liable to such sudden changes, and is generally fine and beautiful through December and part of January. But after that in February and March the mistral sets in, a strong and cutting wind which is terribly felt in all places where the mountains recede any distance from the shore. Then the mornings and evenings are cold, and the contrast from the warm mid-day sun is so great that it frequently produces most injurious effects on the invalid.

There are occasional storms too—lightning and thunder, and drenching rain, which pouring down from the mountains fills the streams and rushes on to the sea, discolouring it with white mud for miles away. At such times as these it is necessary to keep as closely to the house as in the worst phases of the English climate.

One of the greatest annoyances to be complained of is the dust. It lies everywhere, in all directions, and when the wind is high it is driven for miles along the roads, and may be seen rising in clouds over the tops of the loftiest houses. Or if the air is calm and the day inviting, and you think of having a lovely invigorating ride, the wheels of voiture and the tramping feet of the horses do what the wind did before: surround you with a cloud of dust which annoys you beyond measure. Besides this, all the towns are badly drained, and sometimes the smells are intolerable. These are some of the disadvantages attending a winter's residence there in the most favourable seasons, but there are years when the propriety of going at all is very equivocal. The cold is sometimes very severe, and the season unpropitious. I have known the ice thick enough to bear, and seen the gentlemen who were staying at the same hotel as myself out sliding upon it, and longing for some skates to astonish the natives while amusing themselves; and the same season the snow and sleet fell, and the winds blew fearfully cold down to the sea shore. Many winters at home have been scarcely less unfavourable than that. This year, also, I find from others that snow, frost, and cold winds, have been prevalent there. The following quotation from the *Daily Telegraph* shows that my information is correct :—

"Mentone, generally a sort of human hothouse, has been drenched with cold rains and lashed by the mistral; so have Cannes, Nice, and Hyères; while the same snowstorms which twice covered this kingdom with a white veil also hid France from end to end in wreaths and drifts. The trains have stuck fast with the Frenchmen as well as with ourselves. Far south even—at Bremen, Nismes, Grenoble, Avignon—nothing could move for days on the line; and on the country roads traffic was quite suspended. The railroads, almost from end to end of France, were lined by huge walls of snow, whirled and piled in dazzling fantastic shapes along the cuttings and levels. Even among the olives and cypresses of Provence, where frost is hardly known, there have been deep snow-drifts, and the hot volcanic hills round Marseilles have been whitened from head to foot with snow."

It is natural for persons when ill, especially those whose lungs are tender, who feel the effects of this changeable atmosphere, to think that a sojourn during the winter months in a more equable climate will be an effectual means of restoration to health. It may be that in certain cases many have found relief, and some few restoration. Yet I have known persons who have gone out under medical direction, and who had every appearance of deriving benefit from the change, fall away and die in a season or two, contrary to their own expectation, and the earnest hopes of their friends. The first time I entered the burying ground connected with the English Church at Nice, I was forcibly struck with the extent to which this occurs. The enclosure is filled with the dead who came out eager to regain their health, but whom the last enemy ruthlessly pursued and overtook, and the various tomb-stones, the last indication of surviving and sorrowing affection, silently reiterate the melancholy tale.

On the whole I give it as my opinion, judging from experience, that if the people would make up their minds to stay at home, keep their houses warm and dry, and not go out in bad and treacherous weather, they would be quite as well in their own native country. The money which they spend among foreigners would be more than amply sufficient to surround themselves with every comfort and every luxury they might require, as well as to encourage trade and give employment to many a poor destitute family at home. But it is fashionable to go away for the winter, and pride often makes excuses about health the more easily to justify the expenditure and excess. It would be well if this fashionable mania, which invariably

* To allow for the interval between the dates of death and registration, and to some extent for the time between the first application of cold and its effects, the deaths registered in each week are compared with the temperatures of the week before.

† A cubic metre is equal in volume to 35·3174 cubic feet, or to 220·0967 imperial gallons. It is nearly equivalent to the old English tun of four hogsheads, holding 35·248 cubic feet. It is in general use on the Continent, and is a much better unit for measuring sewage or water supply than the gallon.

engenders a restless spirit, satisfied with nothing, and contented nowhere, could be put an end to. People would then find out that they are as safe by their own fire-side as elsewhere, and that they are able to enjoy the comforts which no other country can afford; and then when summer returns they can visit our own beautiful and healthful watering-places, and feel themselves refreshed by the change.

In fact, if so disposed, there are several nicely sheltered places in England where they might very advantageously and safely pass the winter months without the fatigue, and in many respects inconvenience, of going abroad. Hoping you will see the justice of my remarks, I am, sir, your obedient servant, ONE WHO HAS CEASED TO BE A WANDERER.

VIVISECTION.

TO THE EDITOR OF THE MEDICAL PRESS AND CIRCULAR.

SIR,—I, for one, cannot forbear expressing my utter abhorrence of the abominable cruelty practised in France in the absolutely unnecessary practice of vivisection.

Since the discovery of the circulation of the blood, and the investigations of Sir Charles Bell, Majendie, and others, I think it will be freely admitted by all humane and sensible men that there is no real occasion whatever to subject the poor helpless brutes to such inhuman tortures as those to which *Veterinarian* alludes at page 69 of your valuable journal of the 16th ult.

I denounce the practice, therefore, as unjustifiable cruelty, and must attribute its continuance to a morbid desire to indulge in wanton cruelty under sanction of law. The merciful man is merciful to his beast, and mercy and kindness are indispensable qualifications to those who would be surgeons in a right point of view. I would strongly advise those young men who think they are aspiring to fame, to devise better means in furtherance of their object than that of verifying the assertion that "the tender mercies of the wicked are *cruel*."—I am, sir, yours, &c., CLEMENS.

NAVAL ASSITANT SURGEONS.

TO THE EDITOR OF THE MEDICAL PRESS AND CIRCULAR.

SIR,—It is to be hoped that the Dublin Medical Students will not be behind their London brethren in declaring their opinion of the late proposition of the Admiralty, and in supporting the honour of the profession they aspire to, by not qualifying with a view to enter the navy until the position of the medical branch of that service is much improved, and its members treated with fit consideration, least, perchance, some truth might attach to an expression recently made use of in the public press—that the services were supplied by "the sweepings of the Irish schools."—I am, sir, your obedient servant,

AN IRISHMAN.

MEDICAL ACTS AMENDMENT BILL.

THE following is the Draft of a Bill to Amend the Acts relating to Practitioners in Medicine and Surgery :—

Whereas the Medical Act (1858) has been found ineffectual to enable persons requiring medical aid to ascertain who are qualified practitioners, and it is desirable to amend the said Act in several respects.

Be it enacted by the Queen's most excellent Majesty, by and with the advice and consent of the Lords Spiritual and Temporal, and Commons, in this present Parliament assembled, and by the authority of same, as follows :

PRELIMINARY.

I. *Construction and short titles.*—The Acts described in the Schedule to this Act and this Act shall be construed together as one Act; and for that purpose the expression "this Act," when used in the Medical Act (of the session of 1858), shall include the present Act; and the Acts described in the Schedule to this Act and this Act may be cited together as "the Medical Acts," and are comprised in that expression when hereafter used in this Act; and this Act may be cited separately as "The Medical Acts Amendment Act (1866)."

MEMBERS OF COUNCIL.

II. *Amendment of Sect.* 7 *of Act of* 1858.—Section 7 of the Medical Act (1858) shall be read and have effect as if the words "qualified to be" were omitted therefrom.

REGISTRATION.

III. *Erasure by Order of Council.*—Where, under the authority of the Medical Acts, the General Council, or any Branch Council, direct the erasure of the name of any person from any Register, the name of that person shall not be again registered in any Register except by direction of the Council which directed the erasure, or by order of a Court of competent jurisdiction.

IV. *Restoration of name.*—If the Council think fit in any case, they may direct any Registrar to restore to his Register any name erased by him therefrom, and the Registrar shall restore the same accordingly.

V. *Repeal of Sect.* 14 *of Act of* 1858.—Section 14 of the Medical Act (1858) is hereby repealed; but this repeal shall not affect the past operation of that section, or anything already done under it, or invalidate any existing Register, order, or regulation kept or made under it, or affect any proceeding or thing commenced under it, or the power of the General Council to make any order in relation thereto; and every such proceeding or thing may be carried on and done as if the said section had not been repealed.

VI. *Registers to be corrected.*—Each Registrar shall keep his Register correct in accordance with the provisions of the Medical Acts and the general regulations and special directions of the General Council (whether made or given before or after the passing of this Act).

VII. *Erasure on death.*—Each Registrar shall erase from his Register the name of any person deceased.

VIII. *Alteration of address, &c.*—Each Registrar shall from time to time insert in his Register any alteration in the address or qualification of any person registered.

IX. *Evidence of death, &c.*—In the execution of the aforesaid duties, each Registrar shall act on such evidence as in each case appears to him sufficient, subject to any regulations of the General Council.

X. *Erasure on ceasing to practise.*—Each Registrar may erase from his Register the name of any person who, having ceased to practise, shall desire to have his name removed from the Register; and each Registrar may send by post to any person registered in his Register a registered letter, addressed to that person according to his registered address, inquiring whether or not he has ceased to practise, and whether he desires his name to be retained on the Register. And if the Registrar does not, within three months after sending such a letter, receive any answer thereto from the person to whom it is sent, he may within fourteen days after the expiration of the said period of three months, send by post to that person another registered letter, addressed to him according to his registered address, referring to the first letter, and stating that any answer thereto has not been received by the Registrar; and if the Registrar does not within three months after sending such second letter receive any answer thereto from the person to whom it is sent, that person shall, for the purpose of the present section, be deemed to have ceased to practise, and not desire to have his name retained on the Register. And the name of any person shall not (without his consent) be removed from the Register on the ground of his having ceased to practise, except in pursuance of the provisions of the present section. Provided that a person whose name has been erased from the Register with his consent, on the ground of his having ceased to practise, shall not be liable to any penalty under this section by reason of his being engaged gratuitously in the cure or treatment of any disease or injury.

XI. *Registration of Foreign and Colonial Practitioners.*—Every person who has resided in the United Kingdom for a period of not less than twelve months immediately previous to making his application, and who legally possesses a colonial or foreign diploma from a University, College, or other body qualifying him to practise medicine or surgery in the colony or foreign country where such diploma was obtained, shall be entitled to be registered under the Medical Act (1858.) Provided such diploma shall have been granted by a University, College, or other body recognized in a list to be annually prepared by the General Medical Council, which list shall be submitted to her Majesty in Council for approval, and shall thereupon be published in the *London Gazette*.

XII. *Privy Council may add to list of qualifications.*—If it appear to the Privy Council, on representation by the General Medical Council, that any qualification, other than those described in Schedule (A) to the Medical Act (1858), as amended by this or any other of the Medical Acts, is granted by any University, College, or body in the United Kingdom, legally entitled to grant the same, after such a course of study and such examination as guarantee to the satisfaction of the General Medical Council that any person to whom such qualification has been granted possesses the requisite skill and knowledge for the efficient practice of medicine or surgery, it shall be lawful for Her Majesty in Council to direct by order that every person holding such qualification shall be entitled to be registered under the Medical Act (1858), in the same manner and with the like effect as if the qualification were inserted in the Schedule (A) to the Medical Act (1858).

XIII. *Application of Provisions* 20, 21, 22, 29, *and* 39 *of the Medical Act of* 1858.—The provisions contained in Sections 20, 21, 22, 29, and 39 of the Medical Act (1858) shall apply to any qualification which in pursuance of this Act entitles persons to be registered under the Medical Act (1858).

XIV. *Degree of Bachelor of Surgery to be a qualification.*—The degree of Bachelor of Surgery conferred by any University in the United Kingdom, which now is, or hereafter shall be, legally entitled to confer the same, shall, for the purpose of enabling any person to be registered under the Medical Act (1858), be deemed to be one of the qualifications described in Schedule (A) of that Act.

UNREGISTERED PERSONS.

XV. *Repeal of Sect.* 40 *of Act of* 1858.—Section 40 of the Medical Act (1858) is hereby repealed; but this repeal shall not apply to or in respect of any offence committed before the passing of this Act, or affect any proceeding pending at the passing of this Act.

XVI. *Penalty for the assumption of titles, &c., by unregistered persons practising Medicine or Surgery.*—If any person practising medicine or surgery, or engaged in the cure or treatment of diseases or injuries, not being registered under the Medical Acts, takes or uses any of the designations enumerated in Schedule (A) to the Medical Act (1858), as amended by this Act, or by any other of the Medical Acts, or the designation of Physician, Surgeon, Doctor, or Apothecary, or any other designation used by or used to distinguish duly qualified practitioners of medicine or surgery, or any class thereof, or the designation of Professor of Medicine or of Professor of Surgery, he shall for every such offence be liable on summary conviction to a penalty not exceeding twenty pounds.

SAVING.

XVII. *Extension of savings to former Acts.*—Nothing in this Act shall prejudicially affect any occupation, trade, or business, rights, privileges, or employment expressly saved from the operation of the Medical Act (1858), or affect the rights or interests of any person or class of persons expressly exempted or protected by any provision of any of the Acts described in the Schedule of this Act.

Medical News.

APOTHECARIES' HALL OF LONDON.—The following gentlemen passed their examination in the Science and Practice of Medicine, and received certificates to practise, on Thursday, January 31, 1867:—

William Draper, Middlesex Hospital, Grantham.
Samuel Charlesworth Hirst, Leeds Hospital, Bowling, Bradford.
William Edward Ditchett, London Hospital, Louth, Lincolnshire.
Henry Edward Armstrong, Newcastle Hospital, The Dispensary, Newcastle-on-Tyne.
Richard Strange Hall, Manchester Hospital, Leight, near Manchester.
William Iliffe, St. Bartholomew's Hospital, Nuneaton.
Frederick Octavius Davies, St. Bartholomew's Hospital, Bermondsey, New Road.
Charles Berrell, King's College Hospital, Arundel-street, Strand.
Robert T. Jenkins, Charing-cross Hospital, Brewer-st., Oxford.

LIST OF ENTRIES IN THE REGISTER OF THE BRANCH MEDICAL COUNCIL [IRELAND], for the month of January, 1867:—

Cordner, Louis Maxwell, Dublin, L.R.C.S.I. 1866; L. 1866, and L. Midwif. 1866, K.Q.C.P.I.
Pearsall, Wm. Rooth, Dublin, L.R.C.S.I. 1866.
Morgan, Jerome William, Rathgar, County Dublin, L.R.C.S.I. 1865; L.K.Q.C.P.I. 1866.
Drew, James Blakney, Termonfeckin, County Louth, L.R.C.S.I., 1866.
Power, Robert Vincent, Cork, M.D., Q.U.I. 1866; L. in Mid. R.C.S, Edin. 1866.
O'Reilly, Thomas, Kilkenny, L., 1866, and L. Midwif. 1866; K.Q.C.P.I., L.R.C.S.I.
Bolster, Thomas, Mallow, Co. Cork, L.R.C.P.I. 1866; L.R.S.P.I. 1866.
Orton, Frederic, Beeston, Notts, M.D. Univ. Dub. 1866., L.R.C.S.I., 1865.
Nason, Henry Wilson, Conna, County Waterford, L.R.C.Phys. Edin. 1866, L.R.C.Surg. Edin. 1866.
Kerin, John, Tralee, County Kerry, L.R.C.S.I. 1865.
Supple, James Francis, Dublin, L. 1866, and L. Midwif. 1866; K.Q.C.P.I., L.R.C.S.I. 1865.
Holmes, T. J. Paul. Rathmines, County Dublin, L.R.C.S.I. 1866; M.B. Univ. Dub. 1866.
Purcell, Geoffrey Chaucer, Dublin, L.R.C. Phys. Edin. 1867; L.R.C.S. Edin. 1867.
Wheeler, William Ireland, Robertstown, County Kildare, L. 1866, and L. in Midwif. 1866; K.Q.C.P.I., L.R.C.S.I. 1866.
Wade, Nugent, Kilcock, County Kildare, L. 1866, and L. Midwif. 1866; K.Q.C.P.I., L.R.C.S.I. 1866
Irving, George Clerk, Dublin, L.R.C.S.I. 1866; L.K.Q.C.P.I. 1867;
Townsend, Edmond, Cork, M.D. Q. Univ. Ireland, 1866; Mast. Surg. Q.U.I. 1866.
Cogan, Thomas Sillery, Slane, County Meath, L.R.C.S.I. 1866; L 1867, and L. Midwif. 1867, K.Q.C.P.I.
Ternan, Obadiah, Dublin, L. Apoth. Hull, Dub. 1867.
O'Reilly, James, Dublin, M.B. 1866, and Mast. Surg. 1866, Univ. Dublin.

THE Paris correspondent of a Belgian journal mentions that the Emperor fainted, the other day, on his return from a shooting excursion.

CARBOLIC OR PHENIC ACID.—This compound, recently found so efficient as a disinfectant, is now used for internal disinfection, in the form of a lozenge.

EXCESSIVE COLD.—Three inquests were held on the 17th ult., on persons who had died from the cold. They were—a boy named Johnson, a native of Barbadoes, who came over in the ship *Islander*, and two elderly women, named M'Donald and O'Neil. The evidence in each case showed that the excessive cold was at least the proximate cause of death, and the juries found accordingly.

MEETING OF THE MONAGHAN GUARDIANS.—At a large and influential meeting of the Monaghan Board of Guardians, on the 30th ult.—the Right Hon. Edward Lucas, in the chair—on the motion of James Fiddes, Esq., Hollywood, seconded by Joseph Crowe Wright, Esq., J.P., it was unanimously resolved that the salary of Dr. Coulter, Medical Officer of the Scottstown Dispensary District, be increased from £80 to £100 per annum.

THE WEATHER IN CORNWALL.—The *Times* says that the readings of thermometers kept at Altarnum vicarage, Cornwall, prove that the approximate mean temperature of the first 22 days in the present month was (omitting decimals) 30°. The absolute *minimum* temperature was reached on the morning of the 15th, when the thermometer in the air registered 28° and on the grass 30° below the freezing point of water, a temperature very rarely attained in Cornwall. The total rainfall of the 22 days amounted to 7·83 in. The wind during the same period traversed two complete circles, performing the first in six days without remaining long in any point of the compass. The weather is now very mild.

PAUPERISM.—The comparative statements respecting pauperism in England and Wales for the month of November, 1866, and the same month in the preceding year have just been issued. For the whole kingdom, the increase in the fourth week in November, 1866, as compared with the same week in 1865, was 17,742, or 2·1 per cent. The returns for five divisions—the South-Eastern, South Midland, North Midland, North-Western, and York—show a decrease. The greatest decrease is in the North-Western division, which comprises the two counties of Lancaster and Chester. There were 4642 fewer paupers in the fourth week of November, 1866, than in the same week in 1865. In the Northern division, which contains Durham, Northumberland, Cumberland, and Westmoreland, there had been as great an increase in proportion to population as there was a decrease in the cotton manufacturing districts. In the northern division the difference between the two months was only 4·9 per cent. increase. In the last week in November, 1866, the metropolitan unions relieved 16,572 more paupers than in the corresponding week in 1865. The difference between the two weeks was an increase of 16·9 per cent.

THE LATE DR. M'CANN.—This well-known member of the profession died on the 24th ult., of bronchitis. He was a remarkable example of the success which may be obtained by persevering industry, though it may not be accompanied by extraordinary abilities. Born in Ireland, he commenced his career in the metropolis as dispensing assistant to a firm of leading apothecaries, more than forty years ago. By his industry and assiduity he speedily obtained sufficient funds and intelligence to enable him to pass the College of Surgeons. This he did in 1827. He soon after established himself in practice in Parliament-street. By great tact and knowledge of the world he soon became the leading practitioner of the neighbourhood. He obtained several important posts. He was surgeon of the A division of Police, Surgeon to the Royal Humane Society, Justice of the Peace for Middlesex, and Deputy Lieutenant of two counties. His career is an example to others who, without friends or patronage, have to fight the battle of life.—*Lancet.*

ARMY MORTALITY.—The Provost Marshal-General of the Army of the United States has made his final report, showing the operation of his bureau from its organization, in March, 1863, to the close of the war. The tables annexed to the report show that 280,739 officers and men lost their lives in the army. Of this number 5221 commissioned officers and 90,886 enlisted men were killed in action or died of wounds, while 2321 commissioned officers and 182,329 enlisted men died of disease, or, in some few cases, of accident. This will give 1 officer killed in action or died of wounds to every 18 enlisted men, which makes the mortality of the officers somewhat greater than that of the men, as the former constitute about 1-25th of the entire force, supposing the organizations to be full. We find, however, on the other hand, that not 1 officer to 90 men has died of disease. Several reasons are given for this remarkable disproportion in favour of the commissioned class; one is, "the superior *morale*, the hopefulness and elasticity of spirit which is given to a man by investing him with a commission and its accompanying authority, responsibility, and chances of advancement." The disproportion between the mortality of the commissioned officers and enlisted men of coloured troops is still more noteworthy. In this branch of the service the officers lost in killed or died of wounds, 1 in about 42, while the men lost but about 1 in 66. The officers, however, show of deaths by disease a loss of only 1 in 77, while the men show the enormous proportion of nearly 1 in 7, which is by far the highest mortality from this cause exhibited in the records of the army. As the general proportion of deaths from disease among white troops is less than 1 in 17, the question comes up as to whether it is an economic or philanthropic measure to employ troops who are so eminently liable to death from diseases incident upon camp life. It is stated that the loss of the regular army from desertion was 244·25 per 1000, while in the volunteers it was but 62·51. This is accounted for on the ground that the men who enlisted in the regular army, a large proportion of whom were foreigners, were far inferior in character to those furnished by the States.—*New York Times.*

Notices to Correspondents.

Communications to the London Editor should be addressed to 20, King William-street, Strand; to the Edinburgh Editor at Maclachlan and Stewart's, South Bridge; and to the Dublin Editor, at 3, Lincoln-place.

All Contributions are attentively considered, and unaccepted MSS. are returned on receipt of stamps for postage; but the Editors cannot be responsible for any accidental loss, nor can MSS. or replies be delivered on personal application.

Contributions should be *legibly* written, and only on one side of the paper.

When proofs are forwarded it is of the utmost importance that they should be corrected and returned without delay.

Communications respecting Hospital Reports should be addressed to "Editor of Hospital Reports Department," London, Edinburgh, and Dublin, respectively.

M.D.T.C.D.—Will the correspondent who writes under this signature favour us with a title to his paper?

The Harveian Society.—The notice has been received.

The Royal Institution.—The notice has been received.

Mr. Callender.—The list is inserted.

Mr. Richardson.—Your letter has been received, and will appear in our next.

BOOKS RECEIVED.

Holmes Coote on Joint Diseases.

On Venous Saline Injections in Asiatic Cholera. By Gilbert Finlay Girdwood, M.D. London, 1866.

Practical Observations on the Intellectual, Sanitary, and Medical Treatment of the Deaf and Dumb. By S. H. Purdon, M.D. Belfast, 1866.

Proposition for a New Reform Bill, to fairly represent the interests of the people. By W. F. Stanley. London, 1867.

The Pathology of Aphasia. By Alexander Robertson, M.D. Pamphlet. Glasgow, 1867.

A Statistical Inquiry into the Sanitary Condition of Kingstown. By the late Charles Halliday, Esq., M.R.I.A. Edited by Dr. T. M. Madden. Dublin, 1867.

Practical Observations on Asiatic Cholera, &c. By W. Beamish, M.D. Dublin, 1867.

Edinburgh Medical Journal. February, 1867.

Glasgow Medical Journal. February, 1867.

Gazette Medicale de Paris. L'Union.

Bulletin Général de Therapeutique, several numbers.

MEDICAL VACANCIES.

Belgrave Hospital for Sick Children—Hon. Physician and Hon. Surgeon.

Holton Infirmary—House-Surgeon.

Cumberland Infirmary—House-Surgeon.

Western General Dispensary—Physician in Ordinary.

MEDICAL APPOINTMENTS.

ARCHER, J., F.R.C.S.E., has been appointed Consulting Accoucheur to the Birmingham and Midland Counties Lying-in Hospital and Dispensary for the Diseases of Women and Children, on resigning as Surgeon.

BAUMLER, C., M.R.C.P.L., has been appointed Honorary Assistant-Physician to the German Hospital, Dalston.

BELL, H. R., M.R.C.S.E., has been appointed Honorary Surgeon to the St. Pancras and Northern Dispensary, vice R. P. Middlemist, L.R.C.P.L., resigned.

DANE, T., M.R.C.S.E., has been appointed an Assistant-Surgeon to the Western Ophthalmic Hospital, Marylebone-road.

DWYER, HENRY, L.R.C.S.I., L.K.Q.C.P., L.M., has been elected Medical Officer to the Newport Dispensary District, Tipperary.

EDWARDS, G. N., M.D., F.R.C.P., has been appointed Physician to St. Bartholomew's Hospital, vice Dr. Jeaffreson, deceased.

EDWARDS, J. H., M.R.C.S.E., has been appointed Surgeon for the Home District of the Chorlton-on-Medlock, Rusholme, and Moss-side Dispensary, Manchester, vice J. Medd, M.D.

ELKINGTON, G., jun., M.R.C.S.E., has been elected Hon. Surgeon to the Birmingham General Dispensary, vice C. Warden, M.D., resigned.

FOSTER, M., M.D., has been appointed Teacher of Practical Physiology and Histology in University College, London.

GREALY, Dr. F., has been appointed Medical Officer for the Moycullen Dispensary District of the Galway Union, vice R. J. Morgan, L.R.C.P.Ed., resigned.

HALL, F., M.R.C.S.E., has been appointed Medical Officer and Public Vaccinator for District No. 1 of the Leeds Township, vice Robert Cottam, M.R.C.S.E., deceased.

HUNTER, Dr. W., late Physician and Medical Superintendent of the City Parochial Fever Hospital, Glasgow, has been appointed Assistant Medical Officer to Town's Hospital and Lunatic Asylum, Glasgow, vice J. B. Barbour, M.D., appointed Resident Medical Officer to the London Fever Hospital.

JONES, R. A., M.R.C.S.E., L.S.A., has been appointed Medical Officer to the North Wales Training College, Carnarvon, vice R. Jones, M.R.C.S.E., L.S.A., deceased.

LEE, H., F.R.C.S.E., Hon. Fellow of King's College, London, Surgeon to St. George's Hospital, has been appointed Surgeon to Queen Charlotte's Hospital, vice Chas. Hawkins, F.R.C.S.E., resigned.

LEWIS, F., M.R.C.S.E., has been appointed Assistant-Surgeon to the Western Ophthalmic Hospital, Marylebone-road.

MACBETH, J., M.A., M.B., C.M.Ed., has been appointed Senior Resident Surgeon to the Birmingham Lying-in Hospital and Dispensary for Diseases of Women and Children.

MASON, F., F.R.C.S. (formerly Assistant-Surgeon to King's College Hospital), has been elected Assistant-Surgeon to the Westminster Hospital, vice Christopher Heath, F.R.C.S., lately appointed to University College Hospital.

MOORE, J. D., M.D., F.L.S., has been appointed Honorary Medical Officer to the Lancaster Infirmary.

NESHAM, T. C., M.D., has been elected Physician-Accoucheur to the Lying-in Hospital, Newcastle-on-Tyne, vice S. M. Frost, M.D., resigned.

THOMPSON, W. A., M.R.C.S., L.M., L.S.A., has been appointed Surgeon and Accoucheur to the Oxford Medical Dispensary and Lying-in Charity.

WARD, T. M. M.R.C.S.E., L.S.A., has been appointed Admiralty Surgeon and Agent at Exmouth, vice Mr. Allan Waters, deceased.

WESTMORELAND, J., L.R.C.P., Ed. &c., has been appointed Resident Medical Officer to the New Bridge-street Workhouse, Manchester.

The Senate of the University of Glasgow at their meeting on Thursday, 24th January, conferred the degree of LL.D., on R. G. Mayne, M.D., of Leeds, author of the "Expository Lexicon of Scientific Terms."

MEDICAL DIARY OF THE WEEK.

WEDNESDAY, FEB. 6.

ROYAL LONDON OPHTHALMIC HOSPITAL, MOORFIELDS.—Operations, 10½ A.M.

ROYAL COLLEGE OF SURGEONS OF ENGLAND.—4 P.M. Prof. Huxley, "On the Osteology and Dentition of the Sauropsida, or Reptiles and Birds."

OBSTETRICAL SOCIETY OF LONDON.—7 P.M. Council Meeting.—8 P.M. Dr. Woodman, "On a Case of Cholera during Pregnancy."—Dr. Wynn Williams, "On Diphtheria;" and other papers.

SOCIETY FOR THE ENCOURAGEMENT OF ARTS, MANUFACTURES, AND COMMERCE.—8 P.M.

THURSDAY, FEB. 7.

ROYAL INSTITUTION.—3 P.M. Professor Tyndall, "On Vibratory Motion, with Special Reference to Sound."

HARVEIAN SOCIETY OF LONDON.—8 P.M. Mr. Teevan, "On New Aids in the Diagnosis and Treatment of Urethral Disease."

FRIDAY, FEB. 8.

ROYAL COLLEGE OF SURGEONS OF ENGLAND.—4 P.M. Prof. Huxley, "On the Osteology and Dentition of the Sauropsida, or Reptiles and Birds."

ROYAL INSTITUTION.—8 P.M. Rev. W. Farrar, "On Public School Education."

SATURDAY, FEB. 9.

ST. THOMAS'S HOSPITAL.—Operations, 9½ A.M.

ROYAL INSTITUTION.—3 P.M. Mr. G. A. Macfarren, "On Harmony."

Births, Marriages, and Deaths.

Announcements are inserted without charge, and must in all cases be authenticated with the signature of the sender.

BIRTHS.

SMART.—On the 24th December, the wife of Bath Charles Smart, M.D. M.R.C.S., of Manchester, of a son.

CONNOLLY.—On the 16th ult., at Chatham, the wife of Dr. Connolly, of the Royal Marines, of a son.

FRY.—On the 20th ult., at Thaxted, Essex, the wife of J. W. Fry, M.R.C.S.E., of a daughter.

LONG.—On the 21st ult., at Wells-next-the-Sea, Norfolk, the wife of Frederick Long, L.R.C.P.L., of a daughter.

LINDSAY.—On the 21st ult., at Leshmaghagow, the wife of Dr. J. Lindsay, of a daughter.

ARMSTRONG.—On the 22nd ult., at Belfast, the wife of William Armstrong, L.R.C.S.I., Surgeon 16th Regiment, of a son.

MACKENZIE.—On the 22nd ult., at Weymouth-street, the wife of Dr. Morell Mackenzie, of a son.

TRAQUAIR.—On the 23rd ult., at Eccleston-square, the wife of T. G. Traquair, M.D., of a daughter.

SLEEMAN.—On the 28th ult., at Southwark-bridge-road, the wife of Dr. Sleeman, of a son, still-born.

MARRIAGES.

TEALE—CRUTTWELL.—On the 23rd ult., at Widcombe Old Church, Bath, John W. Teale, F.R.C.S.E., of Scarborough, to Grace Mary, daughter of the late Robert Cruttwell, Esq.

HARPER—ROBINSON.—On the 23rd ult., at Braunton, Devon, Joseph Harper, L.R.C.P.L., of Barnstaple, to Augusta Mary, daughter of Capt. Robinson, of Braunton.

DEATHS.

COWARD.—On the 19th ult., James Eyres Coward, Surgeon, of St. Peter-street, Tiverton.

EARDLEY.—On the 25th ult., John Eardley, L.R.C.P., M.R.C.S., L.S.A., of Charles-street, Westbourne-terrace.

HASLOP.—On the 26th ult., G. H. Haslop, L.R.C.P.Ed., of Buckingham, aged 60.

BLENKARNE.—On the 27th ult., Henry Blenkarne, M.R.C.S.E., of Upper Thames-street, aged 65.

FISHER.—On the 27th ult., John Wm. Fisher, Surgeon, of Huddersfield, aged 29.

CLINICAL LECTURES

DELIVERED IN

STEEVENS' HOSPITAL,

TOGETHER WITH

OBSERVATIONS ON PRACTICAL MEDICINE.

By Sir HENRY MARSH, M.D., Bart.,
PHYSICIAN IN ORDINARY TO THE QUEEN IN IRELAND.

Edited by J. STANNUS HUGHES, M.D., F.R.C.S.I.,
PROFESSOR OF SURGERY IN THE ROYAL COLLEGE OF SURGEONS IN IRELAND, SURGEON TO THE LORD LIEUTENANT'S HOUSEHOLD.

REMARKS ON CHLOROSIS AND HÆMORRHAGE.*

(Continued from page 171.)

Amongst the nervous disturbances to which the chlorotic state is liable, I am disposed to class a very remarkable symptom, one by no means uniformly present, but yet so frequent as to demand a distinct consideration. That to which I refer is the variety of abnormal sounds which accompany the action of the heart and arteries. These sounds vary: sometimes the systolic sound is a sudden, loud, sharp sound; at other times it is rough and harsh; sometimes it is best represented by the quick transit of a whip through the air; more frequently it is the bellows-sound or murmur which reaches the ear. This murmur is not confined to the heart; it extends along the arteries, and the transmission of the bood through the veins is not always effected silently, a peculiar and remarkable sound being heard in some of the larger venous trunks. These abnormal sounds are not the result of organic disease, but arise solely from disturbance of function. This is an interesting and important phenomenon; important, because it establishes the fact, that sounds so frequently characteristic of valvular disease, may and do originate in mere functional disturbance.

As a more distinct and comprehensive account of these sounds, and the circumstances under which they arise, is nowhere to be found than in Dr. Latham's valuable lectures, I shall quote at full length his clear and emphatic description of the phenomenon, though I do not entirely agree with him in the explanation which he has given of it. After having dwelt upon endocardial murmurs as the result of mechanical impediments to the circulation, he says:—

"Certain endocardial murmurs yet remain to be noticed, which are quite distinct, pathologically, from all these. Synchronous with the systole of the ventricles, audible in the præcordial region, and extensively diffused through the arteries, resembling the bellows-sound, and so having the commonest quality of endocardial murmurs, not distinguishable by the ear from those which proceed from mechanical impediment to the passage of the blood, yet themselves springing from a different cause, they form a class by themselves, and a most important class it is. I allude to the cases in which there is an unnatural sound, both endocardial and arterial, and yet no change of structure in the heart and arteries, but a change in the relative proportions of the constituent elements of the blood. The one general fact with which the sound is constantly associated is an impoverishment of the blood, or the state in which its red globules are deficient, and its serum is in excess. Now this impoverishment of the blood would seem to stand to the endocardial murmur in the relation of a cause, from observation of their constant coincidence merely; and much more so from the observation that upon the removal of the first the second always ceases. In proportion as, under proper treatment, the blood becomes richer, and is made to abound more in red globules, the murmur waxes fainter and fainter in the heart and arteries, until it is finally altogether inaudible in both. But if this endocardial and arterial murmur be really owing to an impoverished state of the blood, one would expect to find that the simple abstraction of the blood to a large amount would produce it at any time in a healthy person. And so it will. We are not, indeed, accustomed thus to bleed healthy persons purely for the sake of experiment: but healthy persons sometimes become the subject of such treatment in the case of accident and injuries, and in the first access of accute inflammation; and then we take advantage of the occasion for learning the effect of the experiment beyond the purpose for which it was instituted. And so we find that if in a healthy man we carry bleeding far enough to blanch the surface of the body, we create an audible systolic murmur in the præcordial region, and diffuse it through the arteries.

"Now this murmur is prominently characteristic of certain forms of disease; and, knowing how we can produce it at will, we should expect to find nature producing it exactly or nearly in the same way. Profuse or protracted menorrhagia, by the time it has blanched the skin, has this murmur for its sure accompaniment. Here is direct loss of blood. Chlorotic anæmia has the same. Here is no direct loss of blood, but, what is tantamount to it, a defect or failure of the assimilatory functions, whence the mass of blood is not replenished in due proportion to its expenditure upon the uses of the economy. Generally accompanying the endocordial and arterial murmur, when it is owing to anæmia or an impoverished blood, there is another sound quite different in kind, and formed neither in the heart nor in the arteries, but traceable to the same pathological condition. In following the murmur from the heart along the aorta and subclavian artery, and then above the clavicle, when you reach the carotid you find a new sound superadded to it. You perceive the bellows-murmur coming and going with distinct whiffs, and keeping time with the systole of the heart in the neck as in the chest; but in the neck you perceive, moreover, *a continuous hum*, like that which reaches the ear from the hollow of a marine shell. This is a thing so evident that it was noticed and described, and variously speculated upon, by those who first practised auscultation. But their speculations were wide of the mark. Whence or how it arose no one could tell, until the sagacity of Dr. Ogier Ward traced it to the veins, and showed it to proceed from the movement of the blood within them. The vein which offers itself most readily to the application of the stethoscope, and admits all the easy experiments which serve to certify the fact, is the internal jugular. Place the instrument on the neck, by the side of the trachea, and pretty close to it, and at the same time rest your finger upon the space between the angle of the jaw and the mastoid process; and when your ear has caught a continuous humming sound, and listened for a while and made sure of it, then press your finger firmly down upon the vein, and the sound, if it be the true venous murmur, will immediately cease; then raise your finger, and, if it be the true venous murmur, it will immediately return. A little management and address are needed to find this venous murmur, and then keep it within hearing when you have found it. I have seen it found by accident, heard for a minute, and then lost and never heard again. The instrument has been laid carelessly upon the neck and the murmur has been audible immediately; and then, in expectation of making it heard to more advantage, the neck has been put upon the stretch, the chin raised and the head thrown back, or turned far round to the opposite side, whereupon the murmur has ceased; then the neck has been relaxed, the head brought forward, and the chin inclined towards the sternum, but the murmur has not returned. The truth is, a very free current of blood is essential to the production of the venous murmur. A slight degree of pressure upon the vein will alter its character, and pressure very far short of that which would arrest the current of blood will abolish it altogether. And thus the neck being put upon the stretch, the muscles which lie parallel with the vein and across it are made to exercise pressure enough upon it to interfere with the free current of blood, and to stop the sound; or, the neck being relaxed, the veins and the integuments

* The Dublin Quarterly Journal of Medical Science, Nov. 1st, 1846. Reported by John Hill, A.M., M.B.

get folded together, and so pressure is produced in another way, and this equally stops the sound. Try different degrees of pressure upon the internal jugular vein with the stethoscope when this venous murmur is distinctly audible, and you will find how lightly you must hold the instrument to keep it constantly within hearing, how inconsiderable an amount of pressure will obliterate it, and how each degree short of that which obliterates it will give it sundry varieties, and make it musical. Now these murmurs, whether appertaining to the heart and arteries or to the veins, which have their origin in the quality of the blood that circulates within them, furnish an eminent example of the highest degree of comprehensiveness, both for knowledge and for use, which can belong to the idea of a symptom.

"Where these murmurs are, there a countless variety of other symptoms is found in company with them, pointing to all organs of the body, and giving notice that the functions of all are going wrong; the surface pale and cold, palpitation and dyspnœa, appetite perverse, digestion imperfect, nutrition insufficient, secretions scanty and unhealthy, pain everywhere, and a shattered nervous system and an enfeebled brain. Such a portentous crowd of symptoms strikes the observation at once. But what they all mean we cannot tell, until we take one single symptom for their sole and sufficient interpreter. The murmur which is at the same time endocardial and arterial and venous is comprehensive of them all, and includes the knowlege of them all, inasmuch as it points directly to their one common source, even the impoverished blood. And further, this same murmur not only contains the knowledge of all the rest, but it is the single representative of them all as an indication of treatment. Standing as it does for the sign of impoverished blood, we treat what it denotes and nothing else. But in so doing we treat inclusively every error of function throughout the body which proceeds from it."

Such is Dr. Latham's lucid description of the nature and cause of these abnormal sounds. Are we, however, borne out by observation in ascribing them exclusively to the impoverished state of the blood? I do not think so. If this be the sole and true explanation, why does it happen that there are so many cases of chlorosis, in which the specific gravity of the blood is so low as 1·035—cases which we have examined with the utmost attention, both in the quiescent and excited states—in which this symptom is totally absent? Why is it that this symptom is not more uniformly present? Why do we find it to-day, and lose it to-morrow? Why do mental emotions and sudden exertions produce it? Why is it occasionally present in hysteric patients not labouring under chlorosis? and why is it that this symptom does not manifest itself in cases of profuse hæmorrhage which are slow and gradual, whilst it does, though not uniformly, in cases of rapid and profuse bleeding? Would it not appear from these considerations that these abnormal sounds are, in a considerable degree, dependent upon disturbance of the nervous function of the heart and arteries in excitable and hysteric constitutions? Doubtless the attenuation of the blood, both in chlorosis and profuse hæmorrhage, strongly predisposes to the production of these sounds; but their immediate exciting cause is referable to nervous disturbances; so that, to give rise to this symptom, the contractions of the heart and arteries must, from causes connected with the nervous system, be imperfect and irregular. Hence the blood is propelled in broken streams, after the manner so faithfully described by Dr. Corrigan; and although an attenuated state of the blood renders this more likely to happen, yet that condition alone will not explain the phenomenon. In reference to the subsidence of morbid sound keeping pace with the improvement in the quality of the blood, it should be borne in mind, that the treatment which most effectually enriches the blood does also also as effectually restore tone and healthy action to the nerves.

(To be continued.)

Original Communications.

A CASE IN WHICH TYPHUS AND PYTHOGENIC FEVER COEXISTED, COMPLICATED WITH PLEURO-PNEUMONIA.

By MONTGOMERY ALBERT WARD, M.B., M.Ch.,

AND EX-MEDICAL SCHOLAR, TRINITY COLLEGE, DUBLIN; LICENTIATE OF THE ROYAL COLLEGE OF SURGEONS, IRELAND; DEMONSTRATOR OF ANATOMY AND PHYSIOLOGY, LEDWICH SCHOOL OF MEDICINE AND SURGERY, PETER-STREET.

The question as to the identity or non-identity of the virus in typhus and pythogenic fevers has, at different times since 1840, arrested the attention of all thinking and practical physicians, for previous to this period they were considered as one and the same fever, or different stages of the same fever. Many able arguments have been advanced by the supporters of each side of the question, and even at the present time it remains to a certain extent a *quæstio vexata*.

Dr. Kennedy of this city has been for some time the most ardent supporter of the identity of the two fever poisons, and has brought forward many arguments to prove his views, which have been admirably answered by Dr. Hudson, in the appendix to his lectures on the study of fever, lately published.

The importance of the subject has induced me to lay before your readers the particulars of the following case, which occurred in my private practice last year, and which, I think, bears not a little on the point at issue.

May 12th, 1866, I was summoned at twelve o'clock P.M. to visit Mr. ——, whom I was informed was very ill. I immediately went, and subjoined is the history of the case:—

I was informed by his family that Mr. —— (who was previously a fine strong, healthy young man, aged twenty-five) had been in the habit of drinking for a year or so; that for the last six weeks his appetite had been gradually failing, and his family remarked him losing flesh, and much depressed in spirits. This day week—viz., May 5th—he was returning home intoxicated late at night, when he fell into a ditch of dirty water, near which a foul sewer emptied itself. Here he fell asleep, and lay all night with his feet and legs partially submerged, and his body on the side of the bank. In this condition he was found by some workmen going to their work in the morning, who aroused him up and brought him home, when he was put to bed. He remained in bed during Sunday, the 6th, Monday, the 7th, and on Tuesday, the 8th, he dressed and got up, but did not appear to be at all well to his friends, for he complained of being very cold, and sat over the fire all day. From this day until I saw him, a period of four days, he kept his bed, having got, as he thought, a bilious attack, for which he took some purgative medicines, which induced a slight diarrhœa. This morning he was attacked with a severe diarrhœa and a pain over the abdomen; he also complained of a slight pain beneath the left nipple. For the diarrhœa his family gave him some brandy and laudanum. Towards evening the diarrhœa increased and intense vomiting set in, when I was sent for. When I came I found him in the bed, propped up by pillows in a semi-sitting posture. During the last few hours he had passed some very fœtid liquid stools, with some blood in them. The abdomen was very painful and tympanitic on percussion, and there was evident gargouillement over the right iliac region. On placing the stethoscope under the left nipple, where he complained of a severe lancinating pain, I heard a well-marked friction sound. His skin was hot and burning; pulse 120; tongue covered with a white creamy fur, and red at the edges; countenance dull and anxious; respirations hurried and increased.

As the vomiting, pain in the abdomen, and diarrhœa were the most urgent symptoms, I ordered him—

℞ Plumbi acetatis, gr. xii.
Pulveris opii, gr. iss.
Confect. rosæ, g, s.
M. et divide in pilulas sex capiat unam secundis horis.

℞ Sodæ bicarb. ℥i.
Acidi hydrocyanici dil. ♏viii.
Aquæ menthæ viridis, ℥viii.
Misce. Ft. mistura cujus capiat unciam tertiis horis.

A large linseed-meal poultice to be applied over the abdomen, and another over the left side of the thorax.

May 13th. Diarrhœa greatly moderated; vomiting still continuing, ordered ice to be sucked throughout the day, and the mixture of yesterday to be continued.

14th. The bowels were only moved once last night; vomiting entirely ceased; no pain in the abdomen; he complains, however, of the pain in the left side very much. His breathing was greatly oppressed, and there was a short cough. On examination I found that there was effusion into the left pleural sac, and for the first time to-day discovered a few rose-coloured spots over the abdomen. Ordered beef-tea and two glasses of port wine in divided portions; also a mustard poultice to be applied over the left side of the thorax. Seeing that this was a serious case, I asked for a consultation, which was granted.

15th. I saw him in consultation this day with my friend Dr. Forrest, who made a most minute and searching examination. Since last night the effusion into the left pleural sac had greatly increased, and the rose-coloured spots on the abdomen had visibly extended. Dr. Forrest and I pronounced it to be a case of typhoid fever, complicated with pleuro-pneumonia. Ordered:

℞ Calomel, gr. iv.
Pulveris opii, gr. iii.
Sacch. lactis, ℈i.
M. et divide in chartulas xii., capiat unam tertiis horis.

Emplastam cantharidis 10 inches by 6, over the left side of the thorax. Beef-tea and four ounces of wine.

16th. The typhoid spots were well-developed to-day, breathing more tranquil, effusion disappearing; continues very weak. Former treatment continued, with the addition of a large blister to be applied to the posterior part of the left side of the thorax. Wine increased to eight ounces.

17th. Effusion has nearly disappeared; pain in the side continuing; cough very troublesome, expectorating a viscid sputa tinged with blood; very weak. Ordered:

℞ Ammoniæ carbonatis, gr. xxiv.
Tinct. scillæ, ℥ii.
Syrupi aurantii, ℥ss.
Infusi senegæ, ℥viii.
M. Ft. mistura capiat unciam quartis horis.

Beef-tea and wine to be continued.

18th. Slightly delirious last night; inclined to sleep very much, and very hard to be aroused; complains of no pain in the side; cough much better; tongue very dry, brown, and covered with sordes. Some maculæ appear scattered over the body, interspersed with the typhoid rose-coloured spots.

19th. Profusely maculated; wandering all night, but when aroused quite sensible. His family wished to have the opinion of Dr. Ledwich, to which I gladly consented.

20th. I saw him to-day in consultation with my friend Dr. Ledwich, who at first pronounced it to be a well-marked case of typhus fever, until I pointed out to him some of the typhoid spots which still remained interspersed through the typhus rash. It would be tedious to your readers if I detailed the daily symptoms and treatment of this case. Suffice it to say that, with the able assistance of my friend Dr. Ledwich, who continued in attendance along with me, the poor fellow appeared to be getting on very well, and we thought that he would have pulled through, when, on the morning of the 25th, a critical perspiration set in, and he succumbed the same evening.

The outlines of the above case are copied from some notes which I took for my own private instruction, as I did not at the time intend to publish it, consequently I only hurriedly jotted down the leading features. The following are, I think, the points of interest in this case:—

First. The coexistence of the pythogenic and typhus virus.

Second. The rarity of the complication of pleuro-pneumonia.

Drs. Murchison, Hudson, Anderson, Todd, and others, have in a few cases observed the coexistence of these morbid poisons, and have in my mind clearly proved their non-identity. That they did coexist in the above case I think I have clearly proved. Now, I will endeavour to show how they were severally contracted.

In the history of this case I should have mentioned that this young man was employed in an extensive wine merchant's office in this city, and that he was engaged during the greater part of the day in the wine-vaults, which were underground, and very badly ventilated. Here he was exposed to the temptation of constantly tippling, to which he yielded, and which subsequently undermined his constitution, thereby rendering him more susceptible of imbibing a virulent poison. I believe that from constantly breathing the foul and vitiated air in these vaults he contracted the typhus poison, and that he contracted the pythogenic poison on the night of May 5th, when he lay all night in a ditch, near which a foul sewer opened. This is, I think, what probably took place, at least it is the only way in which I am able to explain it, after a close investigation into the history of the case.

With regard to the complication of pleuro-pneumonia, which is another interesting feature in this case. I am well aware that pneumonia *per se* very often occurs, but the existence of pleuritis is very rare indeed. Dr. Hudson has only seen three examples of this complication in the numerous cases which have come under his notice.*

Hospital Reports.

MEATH HOSPITAL.

REMOVAL OF AN ENLARGEMENT OF THE SUPERIOR MAXILLARY BONE.

By Mr. COLLIS, Surgeon to the Hospital.

On Thursday last, the 7th instant, the theatre of the Meath Hospital was filled with a crowd of students and surgeons to witness the performance of an operation which excited more than usual interest, in consequence of the subject of the operation being a gentleman well-known in the city of Dublin. This gentleman had from childhood suffered from an enlargement of the superior maxillary bone on the left side. During the last two years it had grown with considerable rapidity, and it was finally determined to remove it before it began to press on any vital part.

Mr. Maurice Collis, who performed the operation, began by detaching a layer of bone from the base of the tumour, so as to leave the hard palate and roof of the mouth perfect. An incision was then made from the inner angle of the eye, along the side of the nose, and through the lip, a little external to the mesial line. The soft coverings of the tumour, including the periosteum, were drawn to either side, and its attachments to the malar bone were divided by a strong forceps. The tumour was, by degrees, isolated from the floor of the orbit; this stage of the operation was tedious, owing to the ivory hardness of the bone at this part. The bulk of the tumour was thus detached and removed, leaving a small portion behind which was of softer texture, and which was removed by the gouge. The cavity of the nostril was not opened, as the periosteum of the tumour peeled off readily on that side. Considering

* *Vide* Study of Fever, by Dr. Hudson, Lecture XV., page 253.

the severity of the operation, the hæmorrhage was trifling; but three arteries in the soft parts required ligature, while some jets from the bone were restrained by the galvano-caustic. The flaps were brought together with numerous points of horse-hair suture—a small space being left open about the site of the incisor teeth to give exit to some light dressing, ligatures and discharges. The patient was chloroformed throughout, and seemed to suffer little from the shock.

GUY'S HOSPITAL.

EXTIRPATION OF BOTH OVARIES.

(Under the care of Dr. OLDHAM and Mr. BRYANT.)

A MARRIED woman, 35 years of age, mother of two children, was admitted to Guy's Hospital on the 25th of last March, with polycystic disease of both ovaries. She had observed a progressive enlargement of the abdomen for nearly a year. The diagnosis having been made out, and an operation having been advised and agreed to, Mr. Thomas Bryant performed ovariotomy on the 14th of April. Upon incision, a little ascitic fluid escaped, and the cyst, when exposed, was found firmly attached by a number of adhesions. They were torn through, and two of them tied. The pedicle was ligatured and dropped in, the ends being cut off short. Some cystic disease being discovered in the opposite ovary, this was also removed, and the pedicle also dropped in. The wound was immediately closed, the patient placed in bed, and an opiate given in the form of suppository.

Some vomiting occurred after the operation, and another suppository was given in the evening. Nevertheless, the patient had little sleep during the night, and vomited several times. In the morning the pulse was weak, 120, and she suffered from pain in the abdomen. These symptoms continued in spite of treatment, and she died on the 16th.

This case may remind some Guy's students of a similar one admitted under the same gentlemen three years before, and treated in the same manner, but which was also, unfortunately, followed by a fatal result. The patient was also married, about the same age (being 32), and had had one child. She was admitted in April, 1863. Tapping, however, had in this instance been resorted to. Ovariotomy was performed by Mr. Bryant on the 15th April. There were extensive adhesions to the viscera as well as to the parietes, and when the cyst was removed the other ovary was found to be diseased, and consequently was extirpated. Sickness and peritonitis followed, and the patient died within twenty-four hours after the operation.

We have thus briefly recorded these two interesting and instructive cases, occurring in one of our leading schools, with a sincere desire of placing before our readers the modern practice of the metropolis. It would, perhaps, conduce to more valuable statistics were all the cases in which such important operations are performed briefly recorded. It would seem now to be a common practice to cut off the pedicle close to the ligature, drop it into the abdomen, and at once close the wound—a method which commends itself strongly for its simplicity, and, one may add, its success. In three cases of ovariotomy at Guy's last year, of which we have notes, and which we suppose were his three most recent cases, Mr. Bryant adopted this procedure, and all three happily terminated in recovery.

THE LONDON HOSPITAL.

TRANSVERSE COMPOUND FRACTURE THROUGH BOTH UPPER MAXILLÆ.

(Under the care of Mr. HUTCHINSON.)

A YOUNG man was admitted lately, under Mr. Hutchinson's care, into the London Hospital, with a very rare form of fracture of the upper jaw. His head had been jammed between a "lift" and a cross-bar, and probably one part twisted on the other. On admission he had copious bleeding from his nose and mouth, and his eyelids were ecchymosed, leading to the suspicion of fracture of the anterior part of the base of his skull; but on passing the forefinger into the mouth, Mr. Hutchinson found a transverse fracture, which would admit the end of his finger, passing right across both upper maxillæ from side to side, and communicating with the nose and both antral cavities. The alveolus, containing all the teeth, was completely separated and depressed about half an inch, but was loose and could be easily lifted into place.

Various plans suggested themselves as regards retaining the bone in place, but Mr. Hutchinson contented himself with simply bandaging the lower jaw firmly against the upper one, as this procured very fair apposition. A wedge of gutta percha was placed between the molar teeth on each side.

In a few days an abscess formed in the left cheek and was opened. He is doing very well, and there seems every probability that no exfoliation will take place, and that all the teeth will be saved.

It will be seen that the fragment detached by the line of fracture comprised the entire alveolus, with all the teeth on both sides and the whole of the hard palate. Probably it included also the lower parts of the pterygoid processes, but this point was not ascertained positively. Above the line of fracture the thin plates of bone were much comminuted, and probably the left orbit was involved.

Foreign Medical Literature.

ON NERVOUS ASTHMA.

By BAMBERGER.

Translated from the *Norsk Magazin for Lægevidenskaben*, xx. Band, 1 Hefte, 1866, p. 60,

By WM. DANIEL MOORE, M.D.Dub. et Cantab., M.R.I.A.,

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[The case which gave rise to the following remarks appeared originally in the *Würzburger med. Zeitschrift*, 17 Band, i. and ii. Hefte, 1865, whence they have been translated into the *Norwegian Magazine of Medical Science* by F. Kiær. Not having access to the above-named German journal, I shall translate the author's remarks from the Norwegian version; the details of the case itself I do not think it necessary to reproduce.—W. D. M.]

NERVOUS asthma, the existence of which it is in the present day no longer necessary to prove, may be best divided into a central and eccentric or reflex asthma. The first is a very rare form of disease, whether it be based upon material changes, or these cannot be demonstrated; reflex asthma, on the contrary, cannot be considered as so very rare. The abnormal irritation, the conduction of which takes place chiefly, if not exclusively, through the vagus, proceeds in most cases from the respiratory organs, and asthmatic attacks of undoubtedly nervous nature are by no means uncommon in the most different pulmonary affections, especially in emphysema, but also in violent catarrh, pleuritis, tuberculosis, &c. The so-called hay asthma is likewise a reflex asthma, depending on very extensive bronchitis. In general it is not difficult to distinguish such a nervous attack from the mechanical dyspnœa dependent on the presence of the pulmonary affection. Nervous asthma in an emphysematous patient differs very essentially from the pseudo-asthmatic dyspnœa, which the same patient experiences at another time in acute catarrh, or where there is a large accumulation of mucus. That the irritation may also proceed from other organs, can scarcely be matter of doubt, although on this point we know little positively. That asthmatic attacks may be caused by dis-

eases in the heart and aorta, may be regarded as tolerably certain, although on account of the pulmonary affection almost invariably coexistent therewith, it is difficult to prove that the abnormal irritation proceeds exclusively from those organs. Undoubtedly there exists an hysterical asthma, which ought more correctly to be looked upon as of central origin. On the other hand, the theory which considers asthma as a symptom of gastric, hepatic, splenic, and intestinal affections; that of hæmorrhoidal asthma, and of asthma in tapeworm, in renal diseases (the so-called asthma urinosum is nothing else than pulmonary œdema), and in those of the sexual organs would not now, as it did of old, find many adherents, yet we ought to beware of too unconditionally, and without further examination, entirely rejecting the older theories.

The case above recorded is indeed with great probability to be considered as one of reflex asthma, proceeding from the lung. At least it appears from the history of the case that a violent catarrh had preceded the attacks, and this view was confirmed by the post-mortem examination. As to the finely vesicular emphysema, we may without any hesitation regard it as a secondary phenomenon, produced by the extremely violent disturbances of respiration, but the state of the case would not in any essential point be altered, were we to look upon the emphysema as pre-existing, for which, however, there is not the slightest reason. The other changes in the body present nothing of special interest. The dilatation of the right side of the heart, which, moreover, took place to a moderate degree, is a result of the emphysema. The moderate thickening of the left ventricle can be brought into causal relation only to the atheromatous process in the arteries, just as the systolic bellows' murmur, observed along the aorta during life, can be explained only by the thickening of the inner coat of that vessel. The firm and hyperæmic state of the spleen and kidneys and moderate degree of hydrocephalus are to be considered only as results of the disturbance of the circulation.

But what in this case especially interests us is less the causal relation, which will long continue as obscure as are most of the neuroses, than the mode in which the asthmatic paroxysm manifested itself, and the physical state upon which this depended.

What, properly speaking, is nervous asthma, and how is it developed? To this question we obtain, with rare unanimity, the answer—Nervous asthma depends upon spasm in the bronchi, and mainly in the finer, contractile fibre-cells. Bergson in particular, in his well-known monograph, has taken the greatest trouble to prove this upon negative and positive grounds, but unfortunately without the slightest success. There is just now no other reason given for this view than the mere presence of those muscular elements, which, indeed, involve the possibility, but by no means consequently the actual existence of such a spasm.

Up to the present, however, only Wintrich has appeared in opposition to this generally received hypothesis, and it may be said that Wintrich's statements contain more sound reason than all hitherto written upon nervous asthma. Wintrich does not indeed deny the possibility of a spasm in the bronchial muscles, but that such can be the cause of nervous asthma, and this for two reasons. In the first place, he observed several cases of the disease, in which the diaphragm during the attack lay very deep and immovable, where manifestly there was only tonic spasm of the diaphragm, while this phenomenon cannot possibly occur in bronchial spasm. In the second place, both the inspiratory and expiratory forces are considerably greater than the sum of the forces of the bronchial muscles. I am myself indeed quite of the opinion, that hitherto there is no warrant for the assumption of bronchial spasm as the cause of asthma, and that the causes of the latter must, in the majority of cases, be sought elsewhere; but it, nevertheless, appears to me that it is going too far completely to deny the possibility of such a condition. Against these arguments it may, in fact, be objected, that, in the first place, it is not proved that the diaphragm in all cases of nervous asthma is found to be situated low down and immovable; and in the second place, the preponderance of both the inspiratory and expiratory powers over the powers of the muscular pulmonary elements may indeed be admitted, but this does not hinder us from assuming a conflict between the two, and it is precisely upon this that the asthmatic attack might depend. We might, therefore, simply assert, that in such a conflict the final victory must always remain with the "legitimate" respiratory powers as the stronger, or, in other words, that no one could be suffocated in an attack of purely nervous asthma.

If we now return to our case, there can be no doubt that in it there could have been no such thing as spasm in the bronchi. Even the deep position of the diaphragm in itself renders such a theory impossible. I will, moreover, hereafter revert to the symptoms which must attend spasm in the bronchi, and it will be seen that most of them are directly opposed to those observed in the case in question.

On the other hand, all the phenomena may, with almost mathematical accuracy, be accounted for by the existence of a tonic spasm in the diaphragm and secondary antagonistic spasms in the expiratory muscles depending thereon. The low position and immobility of the diaphragm, in spite of enormous efforts of its antagonists, in connexion with the unyielding nature of the lower half of the thorax, is, in this case, the decisive and convincing element. The absence of respiratory murmur in the lower part of the chest is easily explained by the absolute immobility of the parts of the lungs lying above the diaphragm. Inspiration could take place in the upper parts only with the aid of the superior, and especially of the cervical respiratory, muscles. The inspiratory increase of the capacity of the chest on a level with the xiphoid cartilage, in spite of the complete immobility of the diaphragm, is essentially to be considered only as a diminution of the contraction of the thorax effected during the expiratory spasm by the abdominal muscles. But one phenomenon is more difficult of explanation—namely, the distinctly tympanitic sound in the lower part of the thorax during the expiratory spasm. When the attack occurred, and the diaphragm suddenly assumed its low position, the inferior portions of the lung must have been suddenly inflated. During the expiratory spasm the abdominal muscles must strongly compress the thorax, and thus the pulmonary cells and their membranes must come to be under a very strong pressure. But how is the tympanitic sound to be thus explained? According to Skoda's theory this circumstance—namely, great tension of the cell-membranes, would produce exactly the opposite effect.

After having quoted a couple of theories, which, however, do not seem to the author sufficient to explain the symptoms described, he continues:

"We may therefore say that the picture we might, *a priori*, form of a tonic spasm of the diaphragm and that observed in my patient, completely correspond to one another. Moreover, from Duchenne's experiments on animals, we are acquainted with the symptoms of tonic diaphragmatic spasm produced by electrical stimulation of the phrenic nerves. They agree in all essential points with the phenomena observed in my patient; only the results of percussion are not mentioned by Duchenne; however, these fall away of themselves, as they are dependent merely on the low position of the diaphragm." In the human subject Duchenne has not seen tonic spasm of the diaphragm, but he quotes a case observed by Valette, in which death was caused by spasm in that muscle supervening during an attack of acute rheumatism. The symptoms, with the exception of the state of the abdominal muscles, agreed completely with those experimentally produced by Duchenne: "the abdominal muscles exhausted themselves in vain efforts to contract the base of the thorax". In this instance nothing was seen of these fruitless efforts on the part of the abdominal muscles, which were so very striking in our case. Duchenne explains this difference correctly by showing that with this painful rheumatic contraction of the diaphragm a corresponding antagonistic action of the abdominal muscles

could not take place, because the pains would then be increased; the patient would, on the contrary, be compelled to exert himself to keep these muscles as quiet as possible.

In my patient the tonic spasm of the diaphragm, which attained its greatest height during the attack, seemed not to have entirely ceased in the intervals, at least not in the latter period of the patient's life. The striking slowness of respiration and the invariably increased action during expiration appear to me to prove this. Certainly the diaphragm was movable in the intervals, but the excursion did not, on the deepest inspiration, amount to more than an inch, which is much less than the normal range. Certainly the position of the diaphragm in the intervals also corresponded to the normal, but an increase of the usual tension, a kind of subtetanic condition, is also possible without change of position.

There is consequently not the least doubt that there are asthmatic attacks whose cause lies in a tonic spasm of the diaphragm. In addition to the case now communicated, I remember two others where the paroxysms, if not quite as violent, were so like those here described that I have no doubt that they had the same origin. We have, moreover, the case observed by Wintrich, in which I find only the striking circumstance that the spasm of the abdominal muscles is not mentioned.

I have no doubt that spasm of the diaphragm is the most frequent and most important, but by no means the only cause of nervous asthma. To this opinion I was led even by the fact that, in reflecting on the various attacks of this kind in different patients, I find a very essential dissimilarity in the elements composing the attack, and in its whole bearing. In one case the spasm had a more inspiratory, in another a more expiratory character. At one time these, at another those respiratory forces were in increased activity. On account of the complicated nature of the respiratory act we can imagine different possibilities, whose existence must certainly, for the most part, first be proved.

Thus it appears to me, that the paroxysm in many cases is due to a mere clonic spasm in all or in the majority of the muscles of inspiration; for example, in hysterical asthma (I do not mean the hysterical spasm of the glottis). At least there was in the cases of this kind which I myself observed, always an extremely vehement panting respiration, with the co-operation of all the auxiliary muscles of inspiration, with a perfectly free passage through the larynx. Expiration took place with ease, although it, of course, in correspondence to the inspiration, was deeper and stronger than usual. However, I do not mean hereby to assert that other forms of asthma may not occur in hysterical patients, or that this form is found only in such patients.

Another possibility lies in paralytic states of the diaphragm. It is well known that this state has been observed in the human subject by Duchenne (especially in progressive muscular atrophy, then in lead-cachexy, hysteria, inflammation of the abdominal organs), and it has been produced in many instances, experimentally, by dividing the phrenic nerves. In many cases distinct asthmatic symptoms occurred; in some, on the contrary, the phenomena were not very considerable. Gerhardt, too (*Der Stand des Diaphragma*, Tubingen, 1860), correctly calls attention to the fact that the diaphragm obtains motor branches, not only from the phrenic nerve, but also from the 7th, 8th, 9th, 10th, 11th, and 12th intercostal nerves. It is, indeed, even *a priori*, probable, that such forms will be distinguished by their longer duration. The symptoms which depend on a paralysis of the diaphragm, especially the physical signs, are very accurately described by Duchenne, and particularly by Gerhardt. The diagnosis would, in the concrete case, not be more difficult than the diagnosis of diaphragmatic spasm.

As another possible case, of the existence of which there certainly is at present no proof, we may mention a spasm in the expiratory muscles alone, and principally in the abdominal muscles. In this case the muscles of inspiration must come into increased activity.

Lastly, there remains spasm in the bronchial muscles, which has the least amount of probability in its favour, but, nevertheless, is not inconceivable. What physical signs should we expect under such a condition?

As such a spasm would obstruct both respiratory acts, but expiration has a greater amount of forces at its command, both inspiration and expiration must certainly be laboured, prolonged and combined with great effort of the respiratory muscles, but this would be in a still higher degree the case with inspiration. The diaphragm would probably stand high, the thorax would be diminished in all directions, and the intercostal spaces would be more strongly drawn in, a very considerable increase of the expiratory, and especially of the inspiratory murmur, would necessarily be perceptible. Accordingly as the air, after having overcome the obstruction, could stream into the cells, or as this would be impossible, so must the character of the inspiratory murmur be either vesicular or undefined. In high degrees we might imagine the possibility of a moderate diminution of the resonance of the sound on percussion.

In glancing back briefly on what has been advanced, the conclusion must appear to be fully justified, that nervous asthma depends on different kinds of lesion of motor innervation. The form observed by Wintrich and by me, which depends on tonic spasm in the diaphragm, has been fully established. Scarcely doubtful can that form be considered which depends on paralysis in this muscle; all other possible cases must first be proved hereafter by accurate observations.

In a therapeutical point of view, spasm of the diaphragm has probably most to expect from the uninterrupted current; paralysis, on the contrary, has most to look for from inductive electricity. (The employment of electricity was, in the above case, prevented by the sudden death of the patient.)

SUMMARY OF SCIENCE.

(Specially Edited and Compiled for the Medical Press and Circular.)

By CHARLES R. C. TICHBORNE, F.C.S.L., F.R.G.S.I., &c.

[The Editor of this Summary wishes it to be understood that he is not responsible for the ideas, theories, or the correctness of statements made in any of the papers quoted in the compilation.]

OZONE.

Dr. Charles Daubeny has communicated a long paper on ozone to the Chemical Society. He says ozone must exist in the air; and this being the case, we are led to assume its presence whenever those reagents which detect it in a mixture are affected in the same manner by the passing of air over them.

Paper soaked in a solution of iodide of potassium with starch is the most delicate of the tests; also, a very good test is the protosulphate of manganese. It has been objected that nitrous acid and chlorine would produce similar reactions. "I think, however," says the author, "that it may be proved that neither of these gases exist in the air, which, according to my observations, affect Schonbein's paper" (iodide of potassium and starch). Nitrous acid is generated by electrical phenomena, and chlorine will probably be present near the sea.

Proper care must, however, be taken to exclude direct sunlight, which alone is sufficient to separate iodine from its combinations, so as to produce the blue colour with starch.

From Dr. Daubeny's observations it would appear that in Devonshire, when the wind is blowing from the south-west and west, there is most ozone. After these points the south is richest; east, north-east, and north-west are nearly alike; south-east is still lower, and north is lowest of all. These results were not the same when compared with some made at Oxford at a different season of the year, and he found that the same laws did not hold good.

When water is decomposed by electricity ozone is liberated

at the oxygen pole. As, therefore, the principal agent for restoring oxygen to the air when vitiated by animal processes is vegetation, we might naturally expect that ozone should be disengaged by the leaves of plants during their exposure to sunlight. Dr. Gilbert, however, failed in procuring ozone from leaves exposed to sunlight, but the author's experiments go to prove the contrary.

Leaves, according to Dr. Daubeny, do not appear to give out ozone in the dark; nor do flowers give off ozone. "May not this seem to account for the injurious effects upon health ascribed to flowers when placed in large quantities in sleeping apartments? This has been ascribed by some to the oxygen they consume, but their influence," says the author, "must be inappreciable, and their insalubrity is due to the destruction of ozone by them."

In connection with the part ozone plays in the economy of nature, Dr. Daubeny says—"Plants, indeed, decompose carbonic acid, and thus serve to maintain unaltered the original composition of the atmosphere; but the various products of putrefaction, the emanations from animals, living as well as dead, the exhalations from swamps and marshes, would still continue to contaminate it, were it not for the presence of some agent capable of removing those bodies from the fluid in which they are floating, and of rendering them innoxious by oxidation."

CONIUM IN CONII FRUCTUS.

Dr. Harley, from some communications, &c., published in the *Pharmaceutical Journal*, comes to the conclusion that the *tinctura conium* B.P. is inert, and that the fruit is perhaps not so rich in conia as supposed. He (Dr. Harley) had drunk ℥ij. of a carefully-prepared tincture without any apparent effect. Dr. Garrod and Professor Bentley thought that the activity of the fruit had been underrated. The latter gentleman said that the fruit contained the largest amount of conia just before it arrived at maturity, and that there are grave doubts whether the fruit did not deteriorate by keeping. Dr. Harley says, in connection with this subject: we know that the active principle of the poppy is more abundant in the circulating juices of the green fruit than in any other part. It is very probable that this is the case with conium, and that we must look for the greatest accumulation of its active principle in the green immature fruit.

ON THE FORMATION OF CELLS IN ANIMAL BODIES.

The following is the substance of a communication from E. Montgomery to the Royal Society:—

The so-called organic "cells," chiefly those of various cancerous tumours, were seen on the addition of water to expand to several times their original size, and at last to vanish altogether into the surrounding medium.

The "nucleus" did not always participate in this change, but at times remained unaltered, whilst the outer constituents of the "cell" were undergoing this process of expansion.

This curious phenomenon of extreme dilation is intelligible only on the supposition that the spherical bodies in question are in reality globules of a uniformly viscid material, which by imbibition swells out till at last its viscosity is overcome by the increasing liquefaction.

In embryonic tissues, and in various tumours, single "nuclei" were seen, each surrounded by a shred of granular matter. On the addition of water there would bulge from one of the margins of the granular mass a segment of a clear globule, which continued growing until it had become a full sphere, which ultimately detached itself, and was carried away by the currents. At other times no such separate globule would be emitted, but the entire granular shred would itself gradually assume the spherical shape, ultimately encompassing the "nucleus," and constituting with the same the most perfect typical "cell."

Not only single "nuclei" were found surrounded by a shred, but also clusters of two, four, and more were seen similarly enclosed by a proportionately large granular mass. Under these circumstances it sometimes occurred that, on the addition of water, the whole granular mass of such a cluster became transformed into a large sphere containing two, four, or more nuclei. The resulting body was to all appearance identical with shapes well-known under the name of "mother-cells." In all these cases the granular shred must have partly consisted of a viscid material, which on imbibition naturally assumed the spherical shape.

The author then proceeds to his experimental verification. In all the observations cited by the author, the existence of a viscid imbibing material was proved with almost conclusive evidence—a viscid material which is capable of forming globules of a definite size, and while in the living organism actually forms such globules, shapes, the nature of which has hitherto been mistaken. After a long search the substance known under the name of myeline was found to be the desired material. When to myeline, in its dry amorphous state, water is added, slender tubes are seen to shoot forth from all the free margins. These are sometimes wonderfully like nerve tubes in appearance. They are most flexible and plastic. From this curious tendency of shooting forth in a rectilinear direction, it was inferred that a crystallizing force must be at work. To counteract this tendency, and to oblige the substance to "crystallize" (!) into globules, it was intimately mixed with white of egg. The result was most perfect. Instead of tubes, splendid clear globules, layer after layer, were formed, resembling closely those of the crystalline lens formed under similar conditions.

Here was actually found a viscid substance which, on imbibition, formed globules of a definite size. The remaining task was comparatively an easy one. By mixing the myeline with blood-serum, globules were obtained showing the most lively molecular motion. Thus, says the author, "cells" being merely the physical result of chemical changes, they can no longer afford a last retreat to those specific forces called vital. Physiology must aim at being something more than the study of the functions of a variety of ultimate organic units. And pathology will gain new hopes in considering that it is not really condemned to be the interpreter of the many abnormities to which the mysterious life of myriads of microscopical individuals seem to be liable.

ON THE PURIFICATION OF SULPHATE OF SODA, ETC.

M. Jeannel, in a communication addressed to "Cosmos," proposes to take advantage of the phenomena of supersaturated solutions for the purification of some of the commercial salts.

To purify sulphate of soda the author dissolves 300 grammes of the commercial salt in 100 of water, at a temperature of 33° C. At this temperature the 100 grammes of water are able to take up 322 grammes of the salt. At the same time a filter is placed in a funnel, with about 500 grammes of hot water, at 50°; when the water has all run through, place the solution of soda upon the filter and cover with glass. The solution passes all through the filter and remains liquid for some time after it is cool. When crystallized the salt is separated from the mother liquors, and dried at 33° C.

Sulphate of magnesia, sulphate of zinc, and carbonate of soda are easily purified in this manner; it is not applicable to alum, as that salt crystallizes in the filter. Some salts may be effectually separated, according to M. Jeannel, by the difference of their saturating power. He gives as an instance nitrate of potash and alum. The first-named salt, he says, crystallizes from a saturated solution of alum as if it were in pure water.

ON THE EXTRACTION OF DELICATE ESSENTIAL OILS.

It is a well-known fact that the volatile oils to which such flowers as the jasmine, violet, heliotrope, &c., owe their aroma, are destroyed by distillation, and thus the substitution of *enfleurage*, or the process of extraction by fats. MM.

Millon and Camille Schnaiter propose to use bisulphide of carbon for extracting aromata from such flower, as it boils at a very low temperature—viz., 110° Faht.

Mr. Tichborne proposed this application some years since, but prefered chloroform, as the ordinary bisulphide of carbon is so impure. Mr. Tichborne proposed the use of glycerine for extracting the aroma, and then treating this with chloroform or bisulphide of carbon. M. Schnaiter proposes to extract with bisulphide of carbon, to treat with almond oil, and then again to extract the aroma from the oil with spirit.

AMALGAMATION.

Mr. Nickles (*Journal de Pharmacie et de Chimie*, vol. iv., p. 330) gives us his observations as regards the action of sodium amalgam—*i.e.*, mercury containing a minimum of sodium—and now used with success in mining operations. If a drop of common mercury is allowed to fall upon a leaf of gold cemented upon glass, the drop will adhere and become fluid without increasing perceptibly in extent; but a drop of sodium amalgam will extend with astonishing rapidity, eating its way, and whitening all around it.

Silver and copper leaves are not so easily permeated by the amalgam.

Amalgams of iron and platinum are obtained in the following manner:—To amalgamate iron it is only necessary to rub the metallic sheet with a zinc or brass brush, dipped in acidulated water, and add a drop of mercury. In this case the amalgamation takes place by virtue of a galvanic effect, produced by a metal which, like sodium or zinc, is more positive than iron.

Amalgams of sodium attack platinum and aluminium, but are without action on magnesium.

When metals which are not wetted by mercury have been amalgamated by an indirect method—such as by sodium amalgam—the mercury remaining on the surface does not penetrate into the depth of the metal, and consequently does not render it brittle.

ARTIFICIALLY CRYSTALLIZED OXALATE OF LIME.

M. Monier obtains fine crystals of oxalate of lime by reversing a vessel containing a diluted solution of oxalic acid into a dense solution of sucrate of lime.—(Liq. Calcis Saccharatus.)

Ammonio-magnesian phosphate may be obtained in a similar manner.

MERCURIC OXALATE.

Mr. J. Richardson, in a communication to the editor of the *Chemical News*, says that he found the mercuric oxalate to be explosive on rubbing it up in a mortar, evolving a poisonous vapour, which irritates the throat and occasions coughing. The author says that it becomes decomposed, on heating, into metallic mercury and carbonic acid.

ACTION OF CHLORINE ON AMYLENE.

M. Bauer says that chlorine is absorbed by amylene without the disengagement of hydrochloric acid :—

Chlor-amylene $C_{10}\ H_9\ Cl$. boiling at 130° Fah.—139° Fah.
Chloride of amylene $C_{10}\ H_{10}\ Cl_2$.
Chlorinetted chloride of amylene $C_{10}\ H_9\ Cl_3$, crystallizes.
Bichlorinetted chloride of amylene $C_{10}\ H_8\ Cl_4$, a heavy liquid boiling at 73·4-75·2 Fah. are formed.

CHLORO-SULPHIDE OF PHOSPHORUS, CHLORO-SULPHIDE OF CARBON, ETC.

M. Chearier has obtained a chloro-sulphide of phosphorous ($P\ Cl^3\ S$) by acting on chloride of sulphur by phosphorus. It is a liquid boiling at 125° C. Two modifications of sulphur are deposited from the residues on drawing off the chloro-sulphide; one crystallized in prismatic needles, which are opaque, the other in octahedra, are transparent and very brilliant.

Mr. W. Hartley (*Journal of the Chemical Society*) has isolated a chloro-sulphide of carbon, $C^2\ Cl^2\ S^3$, the name applicable under these circumstances being chloro-sulphoform—a body of the composition $C^2\ H^2\ S^3$ being already known and called sulphoform it being chloroform in which sulphur replaces chlorine.

Silk Collodin.—M. Persoz makes a collodion by dissolving silk in warm chloride of zinc, the latter being removed by Prof. Graham's method of dialysis.

Relation between the Products of Oxidation.—M. E. Chapman and W. Thorp continue their researches upon the above subject. Glycerine and mannite resemble each other in many particulars. They both yield iodides of secondary alcohol-radicals when treated with hydriodic acid and these iodides, olefines, when acted upon by alcoholic solution of potash, &c. Glycerine when heated with caustic potash yields acetic and formic acids. Mannite yields propionic, acetic, and formic acids. Both mannite and glycerine are converted into carbonic and formic acid by the direct action of chromic and permanganic acid; no other acids are formed in their reactions. In the case of the oxidation of permanganate of potassium on mannite, the action was as follows :—

$$C^6\ H^{14}\ O^6 + 7\ O = 6\ C\ H\ O^2 + H^2\ O$$
Mannite. Formic acid. Water.

M. A. Wurtz has described a *new class of compound ammonias*. The isomerism exhibited between pseudo-amylic alcohol extends to the ureas and to the ammonias. The new ammonia (isoamylamine) is prepared by heating pseudo-amylurea for some days with caustic potash. Isoamylamine has a strong ammoniacal odour, precipitates metallic oxides, and dissolves oxide of copper.

Crystallization of Glycerine.—Mr. Crookes has noticed that glycerine is capable of crystallization. Five tons which were sent from Germany were found on their arriving in London to have solidified to a solid mass. Mr. Crookes attributes this phenomenon to the vibrations of the railway journey across Germany added to the intense cold. The glycerine seemed pure and was tested for sugar and glucose—when once fused it could not be recrystallized.

Action of Mannite upon the Potassio-Tartrate of Copper.—M. Bodenbender, according to the *Bulletin de la Société Chimique*, had stated that mannite reduced the copper salt. M. Wittstein brings forward experiments to prove that pure mannite is without reducing action, and that M. Bodenbender's mannite must have contained some other sugar. The action of mannite is so well known that we are surprised that the statement required contradicting.

Double Salt of Ferrocyanide of Potassium and Nitrate of Potassium and Soda.—This salt has been obtained in the manufactory of Mr. R. Dale, of Warrington. A short notice has been published by M. Martius. It forms fine bright yellow crystals, belonging to the hexagonal system; exposed to the air their surface becomes green. They are phosphorescent and detonate like powder when heated suddenly.

Estimation of Tannin.—M. Wagner uses for the estimation of tannin, sulphate of cinchonine; a little acetate of rosaniline is used with it.

Young oak bark contains	10·80	per cent. of tannin.
Ordinary oak bark ,,	6·25	,,
Pine bark ,,	7·33	,,
Beech bark ,,	2·00	,,
Sumac, 1st quality	16·50	,,
,, 2nd ,,	13·00	,,
Valonia, 1st ,,	26·75	,,
,, 2nd ,,	19·00	,,
Dividivi (husks of cæsalpinnia coriaria)	12·00	,,
Grape seeds	6·50	,,
Hop ,,	4·25	,,

M. Schulzeff uses a saturated solution of sal-ammonic

when estimating tannin by gelatine ; this cause the precipitate to fall easily.

In the first process the rosaniline is merely used to indicate the end of the reaction. Sulphate of cinchonine is easily obtained pure by crystallization, 1·554 parts of the precipitate of tannin and cinchonine salt contained ·430 of cinchonine.

Proceedings of Societies.

SURGICAL SOCIETY OF IRELAND.

FRIDAY, JANUARY 18, 1867.

DR. BUTCHER, President of the College, in the Chair.

SCALD OF THE GLOTTIS.

DR. J. K. BARTON said—The subject of scalds of the throat and larynx has attracted more attention in this country than elsewhere—I suppose from the fact that the habits of our poor people lead much more frequently to the peculiar circumstances which give rise to the accident ; and it is a curious fact, showing how slowly experience makes any change in the habits of the poor, that the custom of children drinking from the spout of a kettle continues to-day, as it was fifty years ago, to be the constant—I might almost say the sole—cause of this dangerous accident.

The French authors Barthey and Rilliet, in their admirable work "On the Diseases of Children," call this an English accident, arising from the common use in England of tea-kettles. They might have still better called it an Irish accident, indeed all they knew upon the subject they acknowledge to have received from the Irish authors, Burgess, Wallace, and Jameson ; and the English, Marshall Hall. The accident seems unknown in France, save by description.

Dr. Bevan, in an able paper upon this subject in the last number of the *Dublin Quarterly Journal*, insists most truly upon the importance of our holding true and accurate views of the pathological effects produced by this accident, before we can arrive at a satisfactory rule of treatment, and contends that the cause of death is *not* mechanical obstruction in the larynx, preventing the admission of air to the lungs, but inflammatory action of the lungs themselves, produced either by the heated vapour being drawn into the lungs at the time of the accident, or by the rapid extension of inflammation over the trachea and bronchi. I think all who read the proofs Dr. Bevan has adduced of this, in the paper I have referred to, will agree with him that in the vast majority of cases which prove fatal, death has resulted from inflammation in the chest, and not from obstructed larynx. Still, in looking over the cases recorded by Marshall Hall, Bryant, and others, it will be seen that in several cases death has taken place suddenly, and before there was any evidence of pulmonary lesion, the cause appearing to be spasm of the glottis, which was found after death to be obstructed by the œdematous and swollen state of the mucous membrane covering the epiglottis, atemo-epiglottidean folds, and even the true chordæ vocales ; so that I think we are compelled to acknowledge that in some instances death results directly from the injury to the larynx, while in the majority of fatal cases death results from secondary inflammation in the lungs ; but we must not forget that this inflammation, whether it be of the bronchi or substance of the lungs, is caused by the injury to the larynx, and that this fatal effect of the scald does not come on for one, two, or often many days after the injury. Three different explanations have been offered of the fact that inflammation of the bronchi or lungs so frequently follows this injury. Dr. Bevan suggests that it may be that the child, in attempting to resist the swallowing of the water, forces or draws some of the heated vapour down into the lungs, where it causes inflammation of the delicate lining membrane of the bronchi ; or again, he suggests that the sympathy is so great between the different parts of the respiratory organs in children, that as soon as the glottis is inflamed, the disease spreads rapidly over the entire respiratory tract. Mr. Bryant, having observed that in cases where he performed tracheotomy, milk which the child was attempting to swallow came out of the canula, suggests that the glottis having lost its healthy irritability, and allowing substances thus to pass down into the bronchi, that these may have excited the subsequent inflammation which took place. Now, while acknowledging the influence which each of these causes may have in particular cases in producing the subsequent inflammation, I would suggest that there is in all these cases a powerful predisposing cause, tending to produce inflammation in the chest, which it is most important to recognize, and this is, the congestion of the lungs which invariably follows any serious obstruction to free respiration. In a few hours after the hot water has been taken into the mouth, the child begins to breathe with a loud croupy sound ; the face becomes purplish ; there is, in fact, every evidence of obstructed respiration, the cause of which we have abundant reason to believe is a swollen, œdematous state of the upper opening of the glottis. When such an obstruction exists, it requires no argument to prove that the lungs will be congested, and the longer this congestion lasts, and the more extreme its degree, so much greater will the danger of subsequent inflammation become. In one of Mr. Bryant's cases, where death took place, and where there was great, but not complete, obstruction in the larynx, he found the trachea and bronchi congested and filled with mucous, the lungs gorged with blood, and the cervical veins much distended.

It follows, I think, from this, that if we see a case of this kind early, our treatment ought to be directed to the swollen œdematous glottis, which, by obstructing the free passage of air to and from the lungs, is producing congestion of these organs, which advancing to inflammation, will be the cause of death. If we can remove the cause the consequence will not follow. Now, the treatment by mercury has undoubtedly been the most successful of any as yet adopted ; but in the treatment of the following case I was led to consider whether it really was necessary, so great was the relief which followed the local treatment, which consisted in constantly keeping ice in the mouth, and scarifying the swollen and œdematous epiglottis, as recommended by Marshall Hall, and by Bryant, neither of whom, however, had put it in practice. The facts of the case are as follows :—

Case.—John Fox, a fine little boy, two and a-half years of age, was admitted into the Adelaide Hospital upon the 16th of December, 1866, having attempted to drink boiling water from the spout of a kettle the day before at about one o'clock ; fifteen minutes after he had received the scald he vomited and continued to cough all the afternoon ; at about nine o'clock in the evening, for the first time, it was noticed that he was breathing with a peculiarly hoarse sound, the cough now ceased, but the hoarse breathing continued to increase in intensity all night ; he did not sleep at all, but was extremely restless and very hot. When admitted to the hospital the next day he was in the following condition: his face, lips, and hands were decidedly of a bluish colour, his respiration very hurried, being fifty-two in the minute, and accompanied by a loud raucous sound, evidently proceeding from the rima glittidis ; the mouth could not be satisfactorily examined, but as far as could be ascertained the soft palate and pharynx appeared covered with a greyish slough ; upon applying the ear to the chest we found that the air was freely entering to the lungs, and as yet there were no bronchitic râles to be heard; pulse very rapid ; skin hot ; a little milk had been taken occasionally since the accident.

The treatment adopted was ice constantly kept to the mouth, and half a grain of calomel and half a grain of hippo every two hours. The ice was evidently very agreeable to the little patient, as he called for it very frequently ; in fact, as fast as one piece melted in his mouth he made signs for another, and that it gave relief to the breathing was evident, for upon visiting him in two hours afterwards, before any other part of the treatment could have had time to affect him, I found his colour decidedly more natural, and his voice clearer when he speaks.

At eight o'clock in the evening the dyspnœa had increased again ; respiration fifty-four ; passing my finger back into the pharynx I felt the epiglottis standing up, greatly swollen, it felt like a cherry from its smoothness and roundness. Conceving that this swelling was œdematous, and that a few scratches through the mucous membrane allowing the escape of the fluid from the submucous tissue would be of service, by removing the swelling round the opening of the glottis, I endeavoured to effect this by means of a bistoury with the point only exposed, and this carefully protected by my forefinger until it reached the epiglottis. The mouth of the little patient was kept open by means of a cork between the teeth ; still although I had very good assistance I found this a difficult proceeding ; at length after several ineffectual attempts I succeeded in giving the epiglottis one or two scratches ; which was followed by sensible relief to the symptoms.

The ice was constantly demanded and supplied. The

calomel was continued every hour during the night, and mustard poultices were applied over both surfaces of the chest.

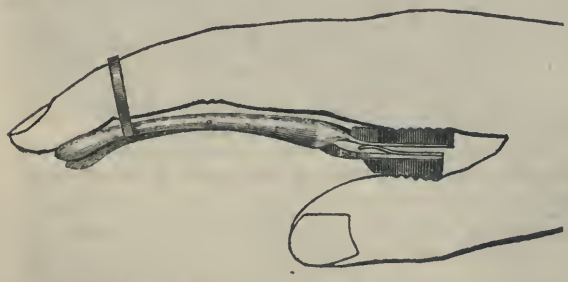
December 17th, ten o'clock A.M. Respirations thirty-six in the minute; much less lividity of colour; bowels were acted on in the night; the child speaks well, and asks for what it wants; has drank milk freely. Calomel continued every two hours, ice as before. Nine o'clock P.M. Slept well during the day, no purging; respirations free in both lungs; less stridor; medicine continued through the night.

December 18th. Slept well during the night; the powder was now discontinued; the bowels having acted once during the night, there was a marked change for the better in the appearance of the child; respiration still thirty; there was a considerable dribbling of saliva from the mouth, but I was not satisfied whether this was the result of the mercury or of the burn. From this time the child gradually recovered, remaining for some days very weak, and taking food with difficulty. Bronchitic râles were audible in both lungs upon the third day, and the child continued to cough for a fortnight.

There will be difference of opinion in this case as to whether the mercury administered was absolutely necessary, seeing that the local treatment gave sensible relief to the most urgent symptoms. All will agree, however, that if the effects of this accident could be safely met by such local treatment as I have described, it would be better than subjecting our little patients to so very active a mercurial treatment.

It was my colleague Mr. Richardson who suggested to me the use of ice, the marked and decidedly good effect of which was manifest to all who was watching the case. I would strongly recommend its use in all such cases. The idea of scarifying the swollen œdematous epiglottis has occurred to several surgeons, being first suggested, I believe, by the late Marshall Hall, and it appears reasonable to conclude, if the whole of the mucous membranes covering the glottis and epiglottis is raised up by submucous effusion, that two or three incisions into the epiglottis will relieve the entire swelling, by allowing the escape of the effused fluid from the submucous tissue, which is continuous all round the opening of the glottis. There is, however, a decided difficulty in the smallness of the child's mouth, and the necessity of guarding the scarificator as it passes through the mouth in attempting to perform this little operation—so great, indeed, were the difficulties I experienced, that I almost abandoned the attempt as hopeless—to meet this difficulty, and to enable this proceeding to be more satisfactorily accomplished in another case, I have devised an instrument, which I will now exhibit and explain.

Dr. Barton then drew the attention of the Society to an instrument for scarifying the epiglottis, which he had had con-



structed by Messrs. Thompson and O'Neill. It would be seen that it consists of a lancet concealed in a sheath, the latter being welded to a ring to enable us securely and certainly to carry the sheathed lancet to the epiglottis. To protrude the lancet when over the epiglottis it is merely necessary to press the little handle, when the scarification can be safely and easily performed.

Dr. Butcher stated that, with regard to the instrument brought under their notice by Dr. Barton, I think it likely to be an exceedingly useful one. Not very long ago a case came under my observation, and the great difficulty felt was that referred to by Dr. Barton. It is a great convenience to have an instrument that can be conducted by one index finger without injuring any portion of the mouth, or requiring the use of a second finger. I am sure that if I get a case of the sort I shall be happy to give it a trial.

The proceedings then terminated.

MEDICAL GLEANINGS.

(From the British and Foreign Medico-Chirurgical Review.)

PELVIC MEASUREMENTS IN DIFFERENT RACES OF MANKIND.

By Dr. CARL MARTIN.

Dr. Carl Martin, son of the eminent professor at Berlin, fills up in a memoir rich in observations and research a void in obstetric literature. Having lived two years in Brazil, he availed himself of his opportunities to measure the pelves of living examples of several races; he has subsequently examined and measured the dried pelves of many European collections, and he has also made comparative measurements of fifty living women in Berlin, of twenty subjects in the dissecting-room, and in sixteen of these last he has measured again the pelvis after drying. Between January, 1860, and the middle of 1864, his observations included 800 cases.

He arrives at the following conclusions:—1. The pelvis of the European woman is the most roomy. The great pelvis is broader than in any other race, showing the greatest distance between the anterior superior spines of the ilia, and also between the cristæ. The inlet is naturally transversely oval, the true conjugate diameter being smaller compared with the oblique and transverse diameters. The alæ of the ossa innominata are mostly translucent.

2. The pelvis of the negress is smaller, and especially narrower; its inlet is also transversely oval, but the true conjugate, like all its longitudinal measurements, are relatively greater than in European pelves. The sacrum is broad and long. The obturator foramina are small. The alæ of the ossa innominata are mostly opaque.

3. The pelvis of the Bushman corresponds to the small stature of the entire body, and is smaller than in any other race. The alæ of the ossa innominata were, in all the specimens examined, opaque. The ischia were, in proportion to the length of the cristæ of the ilia, pretty long, and higher than in any other race. The inlet is sometimes in a high degree oval in antero-posterior direction.

4. The pelvis of the Malayan of Java and the neighbouring islands is also narrow; it shows a small distance of the spines and crests in relation to the rather large conjugate. The true conjugate is very long; the inlet of the pelvis is therefore very round, and in many specimens even oval antero-posteriorly. The alæ of the ossa innominata in all Java pelves show large translucent spots. The ischia are relatively smallest.

5. The pelvis of the aboriginal of America is, according to the few specimens examined, on an average, little smaller than the European; the inlet is round, the outlet large, and the ischia long.

6. The pelvis of the Pelasgian and Australian negresses shows a rather large distance between the spines and crests; a large true conjugate, a small transverse and a moderate oblique diameter, and thus a somewhat round inlet.

Of other races and families, Dr. C. Martin has not obtained measurements. The memoir is also deficient in information as to the comparative characters of the fœtal factor in parturition. Dr. C. Martin says that he has not learned either from his transatlantic practice or his reading whether the remarkable variations in the form of the pelvis influences the mechanism of labour, especially whether the approach to the antero-posterior oval inlet brings the sagittal suture more into relation with the conjugate diameter. The coloured women in Brazil had labours neither easier nor more severe than European women. The plausible theory of Vrolik—that Javanese women bear easily children begotten by Javanese fathers, but not so those begotten by white men—is contradicted by the experience of Lehmann in Amsterdam, who often observed that Javanese servant-girls had easy labours.—*Monatsschr. für. Geburtsk.*, July, 1866.

PERITONITIS, CONSEQUENT UPON PURULENT INFLAMMATION OF THE FALLOPIAN TUBE, INDEPENDENT OF CHILDBED.

By Dr. v. DESSAUER.

The author refers to the accounts given of this mode of origin of peritonitis by Förster and others. (The earliest case in which this connection was clearly traced, however, was described many years ago by Sir Benjamin Brodie.—R. B.) The following is Dr. Dessauer's case:—A woman had been married twenty years without pregnancy. After marriage she began

to suffer from pelvic inflammation. In the last attack there was considerable meteoric distension and pain, preventing minute exploration. She died in a few days. Much fluid serum was found in the abdomen. Exsudations bound the intestines together. A considerable quantity of yellow creamy pus welled up out of Douglas' space. Both Fallopian tubes were much distended, a dilatation as large as a hen's egg being formed in the middle of the right one. The left tube, at the point of greatest distension, was ulcerated and perforated; the borders of the perforation was as if torn, not round, pus flowed out. The cavity of the tube was divided off into numerous spaces, forming small and larger cysts.—*Monatsschr. f. Geburtsk.*, Jan., 1866.

INVERSION OF THE UTERUS AFTER LABOUR.

By Dr. G. MOLLER, of Hamburg.

A SINGLE woman had just been delivered rapidly and easily of a living child—her first. When seen she was very anæmic. The midwife reported that the placenta was expelled immediately after the child, and that when feeling through the abdominal walls for the fundus uteri she found it contracted; that the patient then suddenly complained of pain, and exclained that something had come away from her. The womb was found completely inverted; patient in collapse. The womb was quickly replaced by grasping with both hands and pressure in the pelvic axis. Death followed in a few hours; it was attributed to shock. There was no autopsy.—*Monatsschr. f. Geburtsk.*, June, 1866.

COMPLETE INVERSION OF THE UTERUS, AND SEPARATION OF IT BY GANGRENE.

By E. CLEMENSEN.

A WOMAN, æt. 50, was admitted in the Frederick's Hospital, in July, 1865. She had, with an interval of four years, borne two children, the last thirteen years before. Both labours were easy. Some eight years ago she observed that the uterus prolapsed; menstruation, regular, but scanty, had ceased during the last six months. A month ago a profuse hæmorrhage took place, attended by sacral pains. The uterus was found between the thighs, the size of two fists, completely inverted. In several spots lacerations were observed, extending into the muscular tissue. Some days later the uterus seemed diminished in size; irritative fever set in; gangrene showed itself in the left side of the uterus. The uterus contracted more and more. At last only the orifice remained, as a scar. The woman recovered. The author attributes the origin of the inversion to the altered texture of the organ, resulting from fatty regression after labour.—*Hospital Tidende*, 1865.

ON INVERSION OF THE UTERUS AFTER DELIVERY.

By Dr. DENHAM.

A WOMAN, æt. 23, admitted five weeks after delivery of her first child. Expulsion stage rapid. Placenta forcibly extracted by the midwife ten minutes after birth of child, by traction on the cord and pressure on the fundus of the uterus. Patient suffered much pain during this operation, but suddenly got relief by the expulsion of a large tumour, which led her to exclaim, "Am I going to have another?" A continual hæmorrhage went on until admission, when she was much prostrated and anæmic. Her strength being somewhat restored by diet and medicine, an attempt at reduction was made, unsuccessfully at the time, but three days afterwards the fundus spontaneously returned. A profuse purulent discharge took place for several days. She perfectly recovered.—*Dub. Quart. Journ. of Med. Sc.*, Aug., 1866.

Reviews.

CATALOGUE AND REPORT OF OBSTETRICAL AND OTHER INSTRUMENTS, exhibited at the Conversazione of the Obstetrical Society of London, March 28, 1866. With numerous Illustrations. London: Longmans. 1867.

THE extensive and really extraordinary exhibition of obstetrical instruments held last year, by permission, at the College of Physicians of London, will not soon be forgotten by those who witnessed it, and the Council of the Obstetrical Society have rendered a great and permanent service to the medical profession by thus presenting, in a collected form, a catalogue of the different instruments, with illustrations of their shape and construction and, a concise description of their mechanism and uses. The work is very elegantly got up, and reflects equal credit on the editor, whose name is not announced, and the draughtsmen who have given such excellent representations of the several instruments and apparatus exhibited.

VIVISECTION; is it Necessary or Justifiable? Being two Prize Essays published by the Royal Society for the Prevention of Cruelty to Animals. Pp. 112. London: Hardwicke. 1866.

THE Society for the Prevention of Cruelty to Animals having offered a prize of fifty pounds for the best essay on the merits and demerits of vivisection, the prize was awarded to Mr. Fleming, Veterinary Surgeon in the Hussars; but as the essay of Dr. Markham was considered of nearly equal merit, a second prize was awarded to that gentleman, and the two essays are now published together. They both contain a very good abstract of the circumstances under which vivisection is justifiable, and of the limits which ought to be drawn in performing experiments on living animals.

THE DUBLIN QUARTERLY JOURNAL OF MEDICAL SCIENCE. No. LXXXV. February, 1867.

THE present number of our able contemporary is fully equal to its predecessors, and it cannot fail to please a variety of readers from the fact that the original communications, which are eleven in number, embrace very different and various questions. To those whose chief interest lies in operative surgery, the illustrated papers of Mr. Collis and Mr. Porter cannot fail to prove useful. The oculist will read a good deal about the ophthalmoscope in a paper written by Mr. Wilson, whose friends will moreover find a good portrait of that gentleman on p. 39. Mr. P. C. Smyly contributes "Notes in Medicine and Surgery;" while Dr. Grimshaw favours the profession with "Sphygmographic Observations on the Pulse of Typhus," a good illustrated paper, perhaps the best in the whole number. Dr. Atthill, Mr. Denis Phelan, and Mr. Spencer Wells contribute essays of no small interest to obstetricians; Dr. Maconchy, of the County Down Infirmary, gives a paper on what we may call the special surgical practice to be met with in factories, and Professor Banks gives a paper which is not only good reading, but which is also of sound practical value. The reviews and bibliographical notices are good, and the medical miscellany is quite up to the mark.

THE EDINBURGH MEDICAL JOURNAL. No. CXL. February, 1867.

DR. TILBURY FOX of London opens the "Original Communications" with a paper on the Neglect of the Study of Skin Diseases in England. Dr. Scoresby-Jackson (alas! now no more) and Dr. Matthews Duncan, in effect continue their respective papers commenced in the January number; there are also medical papers by Mr. Junor of Peebles, Mr. Balfour of Leven, and Dr. Watson Campbell of Dunse; and Surgical Essays by Dr. Duncan, and by Dr. George Buchanan of Glasgow. The other departments of the *Edinburgh Medical* are also well sustained this month.

THE GLASGOW MEDICAL JOURNAL. New Series. February, 1867.

THIS number contains three original papers, one review, a report of the proceedings of the Glasgow Medico-Chirurgical Society, and a summary of medical intelligence. Dr. Eben. Watson contributes "Remarks on the Pathology and Treatment of the Advanced Stage of Croup." Dr. Cassells furnishes a paper "On the Normal Temperature of the Body in Infancy and Childhood;" and Dr. S. J. Moore publishes an account of "Recent Cases of Cholera at Ibrox." In Dr. Watson's essay there is, on p. 376, a drawing of a laryngeal lancet, which he occasionally uses in the treatment of cases of croup.

CLONMEL LUNATIC ASYLUM.—The Lord Lieutenant has appointed Dr. Hemphill to be Visiting Physician of the District Lunatic Asylum in Clonmel. Dr. Hemphill holds a high place in his profession, and the appointment will give general satisfaction to his professional brethren, and to the large local circle in which he is so much respected.

The Medical Press and Circular.

"SALUS POPULI SUPREMA LEX."

WEDNESDAY, FEBRUARY 13, 1867.

THE NEW PHARMACOPŒIA.

The British Pharmacopœia of 1867, although not yet in the hands of the Profession, may now be considered an established fact. The enormous expense incurred in the preparation and publication of the former edition, and the spectacle of the great number of copies left unsold, thus entailing a positive loss, have, no doubt, rendered the Council of Medical Education and Registration very cautious in their present venture, and have induced them to bestow the greatest care in rendering the book worthy of general acceptance. It must be admitted that the difficulties in the way of the original framers of the British Pharmacopœia were exceedingly great, and although we do not in any way profess to be in the secrets of the Council, we can perfectly understand the obstacles which must have occurred in their endeavour to reconcile the different, and often conflicting views, of the representatives of the three divisions of the British Empire, most of whom had probably strong views of their own upon many disputed points, and some were, perhaps, inclined to adhere to these views with unnecessary tenacity. Besides differences of opinion as to the best mode of preparing certain drugs, or as to the exactness of equivalent numbers, and other matters of comparatively minor importance, there are really some very serious subjects for discussion in producing a national Pharmacopœia. The efficacy of several drugs, for instance, is by many doubted altogether, while by others the same drugs are declared to be endowed with the most valuable powers in the treatment of disease; and then there are the knotty points of the metrical system of weights and measures, the division of the ounce, and the still greater difficulty of determining the merits of the new as compared with the old chemical notation. On the last point even the most distinguished chemists are not yet by any means agreed, and probably nine-tenths of the existing members of the Medical Profession are not even aware of the theoretical arguments on which the necessity for the new chemical notation is based, or by which its superiority is vindicated. Nay, even if they master the facts, and are able to follow all the reasonings, we are not sure that they will agree in the expediency of the alteration, or that they will not perhaps wish that things were left as they were before Gerhardt and Laurent promulgated their very ingenious but somewhat abstruse notions.

Such are only a few of the difficulties which the editors of the British Pharmacopœia have had to encounter, and we can therefore readily understand the somewhat apologetic tone adopted in the preface to the new book. It informs us that some medicines not included in the former book have been introduced, but in reference to many which have ceased to be in general use, and might perhaps have been omitted, it states that they are retained because the object of the Pharmacopœia is not so much the selection as the definition of the substances prescribed by the physician. Although, therefore, we do not expect many omissions of this kind, we are glad to find that Cocculus Indicus and Rectified Pyroxylic Spirit are among the expurgations, and we never could understand why they were introduced in the former edition.

The arrangement of the substances is different from that adopted in the last edition, and we now find that all the drugs, whether simple or compound, are placed in alphabetical order in the first part, in accordance with the plan adopted in several foreign Pharmacopœias. The object of this plan is to facilitate reference, and to prevent the inconvenience of looking for the same substance in different parts of the book. A most important feature has also for the first time been introduced—namely, a description of the doses of all the more important drugs, the quantities indicated being, as we are informed in the preface, intended to represent average doses in ordinary cases for adults. These doses are not authoritatively enjoined by the Council, and the practitioner is warned that he must rely on his own judgment, and act on his own responsibility in graduating the doses of each drug. As far as we can judge, the doses mentioned in the book are unobjectionable, and although there is nothing homœopatic in the small doses, nor heroic in the large ones, a pretty wide range is usually allowed for the exercise of the practitioner's discretion. As instances of the manner in which this new feature has been treated, we may take at random, for instance, the Dilute Sulphuric Acid, dose from five to thirty minims; Æther, dose from twenty to sixty minims; Aloes, two to six grains; and Tartar Emetic, as a diaphoretic, one-sixteenth to one-fourth of a grain, as an emetic one to two grains, as a contra-stimulant five to ten grains in half an ounce of water. In this last case, it will be observed, there is a very remarkable, and yet a very justifiable latitude, and a similar, though by no means so extensive a range, at least upwards, is allowed in the case of arsenious acid, the dose being stated at from one-sixtieth to one-twelfth of a grain. We repeat that the doses appear to us to be well-defined, and that the quantities indicated, while allowing quite sufficient range for individual judgment, are such as to satisfy any reasonable practitioner of the healing art.

No alteration has been made in the weights and measures directed to be employed in the edition of 1864. The ounce is still divided into 437·5 grains, and the intermediate divisions into scruples and drachms is abolished. The absence of such intermediate quantities is to be regretted, as is also the fact that the ounce is not a simple multiple of the grain; but the arrangement is unavoidable, as the avoirdupois ounce and pound are the weights practically used in the sale of medicines.

RELIGIOUS TESTS AND MEDICAL TEACHING.

On the 8th inst., Mr. Lawson, M.P., obtained leave from the House of Commons to bring in a bill to open the Professorships of Anatomy and Chirurgery, Chemistry, and Botany, in the University of Dublin to all persons, irrespective of their religion. It will be in the recollection of our readers that lately we furnished them with full information regarding these Professorships in four leading articles on "The School of Physic in Ireland," which appeared in The Medical Press and Circular from October 31 to November 21, 1866, both dates inclusive. In order to fully understand this question, it will be necessary for them to refer to these articles.

The clause of the Statute, 40 Geo. III., cap. 84, which Mr. Lawson proposes to repeal, is contained in the 20th Section. We give that section in its integrity:

"XX. And be it enacted by the authority aforesaid, that the said Professorships of the Institutes of Medicine, of the Practice of Medicine, of the Materia Medica and Pharmacy, and of Midwifery, on the foundation of Sir Patrick Dunn, shall be open to persons of all nations professing their faith in Christ, and the said Professorships of the University of Dublin ['that is to say, a Professor of Anatomy and Chirurgery, a Professor of Chemistry, and a Professor of Botany,' Sec. xiii.,] to Protestants of all nations, provided they shall have taken medical degrees, or shall have obtained a license to practise from the said College of Physicians, in consequence of a *testimonium* under the seal of Trinity College, Dublin."

Although this proposal of Mr. Lawson is nothing more than a political move to get rid of all religious tests as qualifications for offices, yet we should not regret to see his bill become law; but at the same time, if the alleged reason for the change be "liberal principles," as they are often called by those who are inclined to be more liberal at other people's expense than at their own, we do not think Mr. Lawson goes far enough. The religious test will still remain, unless the other clause in the 20th Section be also repealed. We refer to the clause providing that the King's Professors must profess their "faith in Christ"—an enactment which, if rigidly enforced, would be really more exclusive than the extraordinary qualification, "a Protestant of all nations"—a phrase totally defiant of strict theological or legal definition. It is a patent fact that while the King's Professor must profess his faith in our Divine Master (although the very terms are capable of most contradictory interpretations), yet the University Professor need not believe any religious dogma at all. He may *protest* against all existing religious beliefs, and although, on the one hand, he may be what is commonly called "a good Protestant," yet, on the other, he may be an English or a Geneva Protestant within the letter and spirit of the law; he may deny the whole Christian revelation, and be the means of spreading opinions which many who "profess their faith in Christ" would rightly regard as neither more nor less than infidelity.

It is plain, then, that the tests imposed by this clause are inoperative, in so far as they can effect what was designed by the framers of the Act; and it is also just that no person professing any form of religion should be excluded from a Medical Professorship because of it. We hope that the Roman Catholic University of Ireland may be able to show that all the reciprocity is not to be on one side; for, while most of the "liberal" *talk* about the exclusive nature of the Dublin University Medical Professorships is somehow or other connected with the Parliamentary supporters of the Roman Catholic University, it does not appear that a single Protestant has ever been appointed to any medical office in that institution; although neither "penal laws," nor the "oppressive spirit of the British Constitution," stand in the way of so desirable an exemplification of liberal principles.

The Board of Trinity College, Dublin, who elect the aforesaid University Professors, are singularly liberal in matters like these; especially when we remember that they are all Anglican Churchmen, and nearly all Doctors in Divinity. At this moment a gentleman who believes "that there is one God, and Mahomet is his prophet" holds a Professorship in the University of Dublin; and such a fact cannot but contrast with the opinions of 1800, when the Board of T.C.D. limited their Professorships to Protestants, while the College of Physicians, being more liberal, extended theirs to all Christians. We must not forget that there may be something to be said on the other side of this question, and so we shall return to it again ere long. Meanwhile we suggest that opportunity should be taken of the introduction of Mr. Lawson's Bill to effect other amendments in the School of Physic Act; and we have ourselves proposed some in the leading articles above refered to.

Medical Press and Circular, Feb. 13, 1867.

HUNTER *v.* "THE PALL-MALL GAZETTE."

This case having on several occasions formed the subject of comment in this journal, it is unnecessary to again allude to the details of the trial. The *Pall-Mall Gazette* exhibits on all occasions a warm interest in the welfare of the

Medical Profession, and avails itself of very many opportunities of advocating its claims. In its raid against quacks and quackery, and in its zeal for upholding the honour and dignity of our Profession, it unfortunately laid itself open to legal action, in the defence of which it incurred considerable trouble and expense. The trial, HUNTER *v.* SHARPE, has, however, been of very great importance to the public as well as to the Profession, and has elicited judicial rulings and expositions of law most advantageous to the medical interests, and which must; no doubt, form precedents in other cases.

It is most desirable that we should present to the conductors of the *Pall-Mall Gazette* some token of our sympathy with them, and of our appreciation of their disinterested exertions in behalf of the Medical Profession, and of their spirited conduct in the defence of this action. It has been proposed to raise a subscription amongst the Irish Profession, the ultimate disposal of which shall be settled by the subscribers, and it is hoped every practitioner in Ireland will respond to this call. Subscriptions will be received by the editor, and by the Honorary Secretaries at the College of Surgeons.

Notes on Current Topics.

PROSPECTS OF THE SESSION.—The anticipations we recently expressed have been formally accepted in the Queen's speech, so that unless the Government should be wrecked on the great rock of political reform, we may expect a considerable amount of sanitary legislation. The prevention of cholera and cattle plague, the extension of the provision of the Factory Acts, the protection of sick paupers in the workhouse infirmaries, and of our merchant seamen in their floating homes, are all questions in which the medical world takes a lively interest, and the prominent position already assigned to them is calculated to enlist the sympathies of all those who have devoted so much attention to the progress of social and hygienic improvements. Let us avoid the word reform in this conjuncture to express, not that we abdicate all political functions, but that a medical journal is not the place for the expression of opinion on this topic, while its influence should be constantly brought to bear in support of any measure for promoting sanitation by whomsoever proposed. Sanitary matters are not party questions, and whatever party may be in the ascendant, we sincerely trust hygiene will receive constantly increasing attention. THE MEDICAL PRESS AND CIRCULAR will supply its readers with full information as to such parliamentary proceedings.

YELLOW FEVER.—A discussion took place at the Epidemiological Society of London last week, which forcibly illustrates the opinions that have been advanced by some of our correspondents. The debate, if such it may be called, arose upon the reading of an able paper by Dr. Milroy, on "Yellow Fever in relation to the Home Population." The author evidently leaned to the doctrine of the non-contagiousness of yellow fever, at any rate in respect to its power of personal propagation, and succeeding speakers seemed all to subscribe to the same opinions. Why, then, the exaggerrated fears of the public? Why are such fears enforced by the severities of the Privy Council, and that, as we have already pointed out, against the opinion of its own medical adviser? We think, that in matters of such importance as this, the Epidemiological Society would only be doing justice to itself to use all its influence to propagate its views. The mere discussion at the meeting in London is not enough, the publication of its *proceedings* is limited; the very full abstracts of the debates on such important topics as this should be given to all the medical journals immediately after the meeting. This would, no doubt, incite a considerable amount of comment, and secure a publicity that can never be otherwise obtained.

MEDICAL OBITUARIES.—The profession have recently lost an unusual number of well-known members. Our obituaries recently contained the well-known names of Dr. Brinton, Dr. Marsden, and Dr. Martin, of Ventnor. This week we have to add Dr. Alexander Sunderland, who died at Brighton on the 31st ult., who was for some fifteen years physician to St. Luke's Hospital for Lunatics, London, and enjoyed a large consulting practice in mental cases; and another name equally well-known to the whole profession, that of Dr. Scoresby-Jackson, of Edinburgh, who died on the 1st inst. of fever contracted in the performance of his duties as physician at the Royal Infirmary.

So many men of mark have recently passed from amongst us, that we have been unavoidedly behindhand in issuing their biographies. This defect, however, we hope shortly to remove.

ROYAL MEDICAL BENEVOLENT COLLEGE.—We hear with unmixed satisfaction that this valuable institution is about to receive four free Medical Scholarships at University College, tenable by such of its students as have matriculated at the University of London. The Council of University College are in this doing a wise as well as a generous action, and the originator of the proposal, who is about to devote £1000 to establish a fund for conferring a further benefit on the recipients, is setting an example that we earnestly hope may be followed by many who have the means of thus aiding the orphans of a profession which has always been the one to confer everything on a public often two exacting or two careless of the pecuniary difficulties of its benefactors.

THE CHAIR OF MENTAL PHILOSOPHY AT UNIVERSITY COLLEGE, LONDON.—The decision of the Council in this election to which we alluded some time ago, has been affirmed by the proprietors, but only by a majority of five (42 against 37.) Mr. Robertson is, therefore, preferred to Mr. Martineau, but assuredly the numbers show clearly that the council gave no satisfaction in rejecting the eminent Unitarian metaphysician on account of his being a preacher. It was not unnatural that the decisions of the governing body should be supported by many, and the case clearly shows how easy it is for professedly unsectarian individuals to receive and act upon their private prejudices. No doubt the College can thrive without Mr. Martineau, and he could add nothing to his laurels by obtaining the professorship. It may therefore be as well for all parties to let the matter be speedily forgotten.

A GOOD EXAMPLE.—The following quotation from the *Pall Mall Gazette* shows the good effects of prompt and energetic measures in case of cholera attack, which may stimulate all at home, in case of the outbreak of the disease, to use timely and vigorous means for its suppression :—

"Lieutenant H. C. Kemble, of the 2d Bengal Cavalry, has just set a noble example to his brother officers. When everybody else was dancing and supping, and attending durbars at Agra, he threw all his invitations into the waste-paper basket, and stopped with his detachment, ten miles away from all the grand doings, till he had stamped out an attack of cholera which threatened to be very serious. Mr. Kemble was escorting Lieutenant-Colonel Eden up to Agra with some 200 sabres. Cholera was reported at several stations along the road, so they turned out of the way to keep clear of it. It broke out, however, when they were near Bhurtpore, and two men died. Of course the escort was not admitted into Agra, though, having established a strict quarantine round the Bhurtpore country, they had apparently got rid of the disease. The European officers, however, and the political agents, with their clerks, &c., were allowed to come in. Suddenly news came from the resildar in charge of the escort that five cases had occurred at once. Mr. Kemble sent off an official request for a doctor, and was himself in camp two hours after the message reached him, eight hours after the first seizure. He at once chose a site for a cholera hospital, burnt the ground on which the sufferers had been lying, and removed the whole camp. This he did every third or fourth day, marching always at right angles to his former course, and moving some two miles from the old position. The treatment began on the 5th of November; by the 15th the doctor declared all convalescent, and on the 20th the official report of "all well" was sent in. Mr. Kemble chose high and airy ground; he burnt heaps of leaves, all the spare grass from the lines wherever his hospital had stood; he was with the sick three or four times a day; above all, he raised the men's spirits—they were dreadfully depressed at first—by playing football with them, letting all who liked shoot over the country, giving prizes for firing from horseback at empty bottles, &c. Lieutenant-Colonel Jackson, his commander, says:—"I have seen Lieutenant Kemble behave well in a charge, but I think his conduct in this case even more commendable."

The Return of the Cattle Plague.—While some members of our profession have been predicting a renewed outbreak of cholera, another epidemic of the cattle plague is actually upon us. In the same establishment, in Islington, in which the first cases occurred in July, 1865, it was last week necessary to slaughter the whole stock. Whence this singular renewal of the disease? The able Medical Officer of Health for the District attributes it to the employment of the old bricks of the last year's hospital shed, for repairing. He is firmly of opinion that to contagion alone is due the spread of the disease; and that in this instance he has demonstrated the precise focus of that contagion. The Privy Council will, no doubt, adopt the most energetic measures. Slaughter is the order of the day; but can no experiment be devised to determine the possibility of destroying the contagious matter? Nearly 53,000 healthy cattle have already been slaughtered in Great Britain to prevent the spread of a disease which, since its invasion, has attacked no less than 253,860 animals. With all the rigour employed in "stamping out" the disease, the loss represented by these figures is such, that its re-appearance may well provoke discussion as to the possibility of meeting it in any other way.

The Sanitary Authorities of the City.—A more than usually animated discussion took place at the Court of Common Council, at the Guildhall, last Thursday, in consequence of Dr. Saunders having moved for a Special Committee to inquire into the sanitary condition of the dwellings of the London poor, and the precautions adopted by the Commissioners of Sewers during the late epidemic of cholera. Our readers are aware that Dr. Saunders has already found some fault with the arrangements of the Commissioners, and on giving his complaints this substantive form, it might have been anticipated that a defence was ready. We cannot, however, commend the personality introduced into the discussion. Dr. Saunders did not deny some merit to the Commissioners, or rather their Sanitary Committee; but he maintained that their subordinate officers were not equal to the requirements of such an emergency—an opinion in which we anticipate a large number of our readers will coincide. We think the retort of the advocates of the Commissioners, as to the circumlocution of the Medical Visitors of the City of London Union, quite beside the mark. However earnest the efforts of the Sanitary Committee to remove every ground of complaint—and The Medical Press and Circular has been the first to acknowledge these—if any nuisances were found by the medical visitors they were quite right to point them out, and a recapitulation of how much has been done is no reply to an assertion that something has been left undone. As we observed last week, the proposal of Dr. Saunders to employ medical men as sanitary inspectors is a simple and feasible plan. We may add that it is one likely to remove all grounds of complaint, and greatly conduce to the welfare of the public.

Parliamentary Intelligence.

HOUSE OF COMMONS.—Feb. 5th.

POOR RELIEF.

Colonel Taylor gave notice that on the 8th inst. Mr. Hardy would move for leave to bring in a Bill relating to asylums for sick and other poor in the metropolis, and for the distribution over the metropolis of portions of the charges for poor relief.

THE FACTORY ACTS.

Colonel Taylor gave notice that Mr. Walpole would, on Friday, the 15th inst., move for leave to bring in a bill for the extension of the Factory Acts, and also a bill for regulating the hours of labour of children, young persons, and women, employed in workshops, and for other purposes.

THE UNIVERSITIES OF OXFORD AND CAMBRIDGE.

Mr. Ewart gave notice that he would on Tuesday next ask leave to bring in a bill to open the benefits of education in the Universities of Oxford and Cambridge to students without obliging them to be members of a College or Hall in those Universities.

FLOGGING IN THE ARMY.

Mr. Otway gave notice that on the motion for going into committee on the Army Estimates he should move a resolution for the abolition of flogging in the army.

Mr. M'Cullagh Torrens gave notice that on this day week he would bring in a Bill to make better provision for the dwellings of mechanics and labourers in large towns.

Feb. 6th.

DUBLIN UNIVERSITY PROFESSORSHIPS.

Mr. Lawson gave notice that on Friday he should move for leave to bring in a Bill to open the Professorships of Anatomy, Surgery, Chemistry, and Botany in Trinity College, Dublin, to all persons, irrespective of their religious creed.

CAPITAL PUNISHMENT.

In answer to a question of Mr. Herbert respecting the Bill of last year on this subject,

Mr. Walpole said the Bill of last year did not come down from the House of Lords till nearly the close of the

Session. The Government, exercising the best judgment upon the subject of which they were capable, thought it ought to be amended in point of form. But he could now inform his hon. friend that two Bills had been already prepared, having for their object to separate the two distinct branches of the subject—namely, that relating to crime exclusively from that relating to capital punishment. The two Bills would shortly be introduced, and hon. members would have an opportunity of considering their provisions.

FEB. 8TH.

METROPOLITAN SICK POOR.

On Friday evening last, pursuant to notice, Mr. HARDY moved for leave to bring in his Bill for the improved accommodation of the sick poor of the metropolis, prefacing it by an elaborate review of past legislation on the subject. The chief improvements requisite were, in Mr. Hardy's opinion, greater cubical space, increased ventilation, and more complete classification of the poor; assuming that he had to deal with about 34,000 persons, including children, he proposed to obtain these improvements by placing all the imbeciles in separate establishments, by removing all children above two years to separate schools, and by providing new accommodation for 2000 lunatics, and for 700 or 800 fever and small-pox patients, either by erecting new buildings or hiring old ones. The infirmaries for the remaining sick poor would be placed under separate boards of management, for many of the evils in their condition sprang from their being managed under a system originally intended for the ordinary poor; and of these Boards one-third of the members would be nominated by the Poor-law Board from persons resident in the district or union rated at not less than £100 a-year. By this means he hoped to secure more efficient inspection, and to give facilities for training nurses and for educating medical officers. For the relief of the out-door sick he proposed to establish central dispensaries; and to require that the medical officers, instead of making up their own medicines, should, in all cases, give prescriptions. The Bill also provided that the Local Acts in the metropolis (ten in number) should be repealed, and that the whole metropolis should be placed under the Poor-law Board.

Mr. HARDY next discussed the equalization of Poor Rates, pointing out various objections to the principle, and intimated that, though he could not consent to equalize the metropolitan rates, the Bill would throw on the common fund the charges for lunatics, fever, and small-pox patients, medical officers, dispensaries, and medicines, registration, vaccination, and the maintenance of children at school. To illustrate the effect of the distribution of these charges, £60,000 in amount, he mentioned that, while it would add 3¾d. in the pound to the rates of the City of London Union, it would relieve St. George's, Southwark, of 1s. in the pound, and would not amount to more than a penny rate over the whole metropolis. The last feature of the scheme—which altogether was very favourably received by the House—was a power to the Poor-law Board to appoint proper officers where the guardians refused or neglected to do it.

Mr. AYRTON, Lord ENFIELD, Dr. BRADY, Mr. LOCKE, and Alderman LUSK made some general remarks in approval of the principle of the Bill, and leave was then given to bring it in.

Correspondence.

MR. RICHARDSON'S REPLY TO MR. HOLT.

PERREVE'S STRICTURE DILATOR.

TO THE EDITOR OF THE MEDICAL PRESS AND CIRCULAR.

SIR,—Mr. Holt at the last moment admits the priority of Perrève. Thrust upon him by the force of fact and of logic, he admits this most important conclusion, and which carries with it the still further admission that he had not the candour to name the originator in any edition of his book.

For the rest, Mr. Holt's simple denial of the facts I have proved, will be taken, after the above admission, fo *what* that denial is worth. I have stated as fact nothing which I have not proved, earning thereby Mr. Holt's epithets of "verbose, personal, and offensive."

"Verbose," of course, because it takes longer to prove than to affirm; "personal," certainly, because addressed of necessity to Mr. Holt; "offensive," doubtless:—I can conceive few things so offensive as bringing to the light of day a want of candour and fairness; happily not often to be witnessed in our own profession.

I have laboured at some pains in behalf of truth, and I have completely fulfilled my task, and set at rest this vexed question of the origin of the instrument now employed for rupturing the urethra, I shall therefore cheerfully submit to the ill-will I must necessarily incur from those, who have been interested in suppressing the facts in question.

Mr. Holt having been driven to admit the priority of Perrève's invention, let us see what he said of this gentleman's instrument in the *Lancet* for 1852, and in which dilator of Perrève's he now finds it necessary to *discover* so many errors of construction.

The following extract from his statement in the *Lancet* in 1852, will clearly explain what terrible humiliation it must have been for Mr. Holt to be compelled now to refer to it:—

"*I think*," says he, "*every object of such dilatation is attained by the following modification of M. Perrève's instrument which I have named the "Stricture Dilator.*"

I confess I am not being able to understand that Mr Holt was called upon to name the instrument the "Stricture Dilator," Perrève having already named it the "New Dilator."

Mr. Holt having stated in his letter of the 9th of last month that in his instrument "you have all the elements of success, while in Perrève's there are errors which have made it unsafe even in experienced hands," let us contrast with that assertion his opinion of the safety of Perrève's instrument as enunciated in 1852:—

"From the success which has attended the introduction of the instrument, and the speedy *yet safe* method by which the stricture can be *effectually* removed, I have no hesitation in affirming that if these patients had been subjected to the present plan of treatment, none of the inconveniences there encountered would have been effected in the same progressive manner as in the cases just related."

As I have already given a detailed account of Perrève's dilator, I shall here merely observe that Mr. Holt's modification of Perrève's instrument was anything but an improvement: for, while he dispensed with one of Perrève's steadying clamps, he did not substitute anything for it.

There is hardly any modification which he could possibly have devised would have answered the purpose so perfectly as the original clamps of Perrève.

The shortening of the conducting-rod was quite unimportant one way or the other.

As just shown, Mr. Holt's observations in favour of Perrève's instrument were consigned to the *Lancet* in 1852. And although there they were, ready at any moment to be brought to light, yet he had the temerity to bring forward the *same* dilator *altogether as his own* in 1861, in both the *Medical Times and Gazette* and in his memoir, totally suppressing any mention of Perrève's name in connection with it. The third line of Mr. Holt's quotation from Don Quixote—

"No fears my daring courage awe—"

is so truly applicable to such rashness that I may exclaim:—

"I thank thee . . for teaching me that word."

It is no wonder then that I did not find Mr. Holt's acknowledgement of M. Perrève's priority as in Mr. Holt's book he refers *only* to his paper in the *Medical Times and Gazette*, in which paper Perrève's name is not mentioned, and he claims the instrument as his own.

An acknowledgement of Perrève's priority would have been rather awkward in a memoir published in 1861, where Mr. Holt introduces the immediate method in the following words:—"Hitherto I have not ventured to publish the plan I adopt, simply for the reason that it is *injudicious to enunciate any new method of treatment which has not been subjected to numerous and repeated trials.*" And yet he was in possession of Perrève's scientific volume, where it is written:—"It is sufficient to see" the dilator "to be convinced that the dilatation may be as *rapid as possible.*" And again:—"The time is near

indeed when the treatment of all urethral coarctations will be, I believe, reduced to a single application of my dilator."—Traité des Retrécissements Organiques de L'Urètre, a Paris, 1847. And he must also have had Civiales' work published in 1858, in which it is likewise written, where Civiale speaks of rapid or *instantaneous* dilatation :—

"Rapid or instantaneous dilatation from within outwards is performed according to two different methods."

"(1)" "According to the first" (Perrève's), "the instrument the surgeon selects, being passed into the urethra, the surgeon *acts with energy* so as to increase the contracted point from five to seven millimètres (one of the limits M. Perrève assigns). The effect is *immediate*, and the force employed is proportioned to the resistance of the tissues."—Traité Pratique sur les Maladies des Organes Génito Urinaires.

I shall now proceed to deal as succintly as possible with the remaining paragraphs of Mr. Holt's letter *seriatim*.

The second paragraph asserts, "*vide* page 54 of my first edition. I simply claimed the credit which attached to the publication of a series of interesting cases subjected to a *novel* plan of *treatment*." That it was not novel is shown above. And here I may observe that Mr. Holt has, in one of his letters (9th January), assumed that in Perrève's method the stricture is dilated and not split, inferring thereby that splitting only occurs from his thrust of the forcer. Now it so happens that Mr. Holt has never yet, that I am aware, produced any positive evidence that when he uses the wedge in the living subject, according to what is known as the immediate method, the stricture is split at all. He has, indeed, in the second edition of his memoir, given an illustration of a stricture which it is stated was split *after death*. But this by no means proves that a similar result ensues in the living subject. On the other hand, it is altogether dogmatical assumption on his part that in Perrèves method of using the dilator, the stricture is only dilated. Such is not the opinion of Civiale who, in speaking of Perrève's treatment, says :—"*The deeper the laceration of the tissues the longer is the consecutive effect sustained.*"—(Ibid). If I do not mistake Mr. Holt is familiar with these words of Civiale.—(Vide Mr. Holt's letter, 9th January).

"Thirdly"—Mr. Holt writes :—"I never denied the existence of a directing-rod in Perrève's instrument." I never said he did. But when he asserts "that this directing-rod, and the clamps attached to the lower half handle, will not prevent any other than the very largest tube from being thrust beyond the blades," he is greatly mistaken, and speaks what is not the fact, Perrève's clamps, directing-rod and grooved half handles being more efficacious for preventing such an accident, than any alteration Mr. Holt has made in the instrument with a similar object.

"Fourthly. The paragraph, 'in the hands of an experienced surgeon,' was necessary, for even Mr. Richardson does not know that the tube in Perrève's instrument will project in spite of the directing-rod." I fear I know a little more of the tube than is agreeable to Mr. Holt ! There is some confusion, however, on *his* part, in this paragraph, the observation, "in the hands of an experienced surgeon," having been applied to the catheter principle of the instrument. "In the former instrument," he states in his book, "it was objected that there was no positive evidence that the instrument was in the bladder, and the objection was a valid one, although *in the hands of an experienced surgeon*, such a difficulty could hardly occur." "This is now remedied by having the directing-rod hollow, with an opening at the back of the curve of the dilator, so that when the stilette is removed the urine will escape in the same manner as it does when a catheter is used."

I have arrived at a deeply critical part of my answer as regards Mr. Holt, for I shall now lay before the reader, evidence that the catheter principle was applied to Perrève's dilator a couple of years before the appearance of the second edition of Mr. Holt's book, where he first claims it altogether as his own :—

"Glasgow, Jan. 30, 1867.

"Sir,—Your letters on the question—"Is the instrument, called Holt's dilator, the invention of M. Perrève or of Mr. Holt," induce me to inform you of circumstances bearing on the subject which have fallen to my experience. In April, 1856, I obtained, in Paris, a Perrève's urethra dilator with curved point (most accurately delineated, Fig. 2, in your letter). This dilator was purchased from me by the late Dr. Hunter, Professor of Surgery, Andersonian University, &c., who employed it with *much satisfaction*, and lent it occasionally to other surgeons from 1856 to 1864. In 1861 I made some alterations in the instrument. I *perforate thed extremity or point of the dilator, that so the urine might escape and prove that the instrument was in the bladder*, and supplied a movable *conducting-rod slightly probed at the point*, that the operator, by carefully manipulating with it, should succeed in introducing the instrument in the more difficult cases. I showed a dilator, with these additions, at the International Exhibition of 1862, and believe these alterations (or improvements, if so considered) had not previously been shown or described by any one. The handle I also modified, and gave it a shape more consistent with our ideas of a staff handle. The original Perrève's instrument obtained in 1856, and the instrument which I modified and exhibited in 1862, I think can be brought forward, if necessary, to corroborate my statement.—I am, sir, your obedient servant,

"William B. Hilliard,
"Instrument and Appliance Maker to the Glasgow Royal Infirmary.
"B. Wills Richardson, Esq., Dublin."

Since the above was received, I have, through the kindness of Mr. Hilliard, seen the instrument. The beak is perforated at the point, but as the conducting-rod is a movable one, it is not hollowed, and so far differs from the arrangement in the so-called Holt's dilator. The object of both gentlemen having been the same, of course Mr. Hilliard is entitled to precedence for a dilator with the catheter principle. It is curious, also, that the handle of Mr. Hilliard's dilator is identical with Mr. Holt's *new* (?) handle brought out for the first time in 1863. It being the same shape, and has no clamps, their place being supplied by *steadying pins* alone.

Mr. Hilliard was the manufacturer of surgical instruments, &c., to whom was awarded the *only* medal "given by the International Exhibition of 1862," "for excellence in the manufacture of instruments" in Scotland. His name is numbered 3530 in the official catalogue.

"Fifthly. Mr. Richardson is again in error, the details of the two instruments *are entirely* different, and this Mr. Richardson's laboured statement fails to disprove." I apprehend this is a question for the profession, and not for Mr. Holt, to decide, and flatter myself that I have clearly proved the two instruments are identical, with the exception of the catheter principle for the escape of urine, which I have shown is Mr. Hilliard's and not Mr. Holt's.

"Sixthly"—Mr. Holt writes—"I again affirm the instrument is *equally efficacious where dilatation is desired*, the sentence simply referring to the applicability of the instrument and not to the propriety of the treatment." I still maintain that the above quotation from his book is a contradiction of his assertion in his letter that he is *never* satisfied unless the stricture is split. He abuses Perrève's and Thompson's dilatation method in the same letter, yet he recommends it (of course without acknowledgement of its being Perrève's method) in his book, and it was the mode of procedure which effected such wonderful results in Mr. Holt's hands in 1852.

How does Mr. Holt, in his seventh paragraph, meet my statement in my letter of the 23rd January, where I say that "he," Mr. Holt, "has not adduced any evidence whatever to show that the instrument had ever been prominently brought before the notice of the profession, or even *used* in the *United Kingdom*, and has not detailed one single well authenticated case of serious injury from a dilator constructed as Perrève directed."

"My information," says Mr. Holt, "respecting the abandonment of Perrève's instrument was derived from *foreign* surgeons who have witnessed my operations at the Westminster Hospital" ! !

As we have no *data* to show that Perrève's instrument was ever prominently brought before the profession in the United Kingdom, possibly it was from foreign surgeons, likewise, that Mr. Smyly received the information that Perrève's dilator was "completely rejected as dangerous," "by the first practitioners both in England and this country," as he so positively asserts in his letters on the 21st November and 9th January !

"Lastly," Mr. Holt writes—"My endeavours have been exercised to produce an instrument so simple that it can be used by *all* members of our profession, and however it may annoy Mr. Richardson, I am happy I have succeeded." Mr. Holt very ingeniously has here introduced another matter altogether foreign to my argument. He is as well aware as I am, that when I spoke of "in the hands of an experienced surgeon," it was in reference to his assertion in his book that in the hands of an experienced surgeon the catheter principle is not necessary, and therefore that he must think the Perrève's dilator a

perfectly safe instrument in similar hands, although it is not provided with an exit for the urine.

As no other practical alteration has been made in the Perrève dilator, it is a contradiction, on Mr. Holt's part, now to say that it has errors of construction which have made its use unsafe *even in experienced hands!*

"It is rather late after six years," says Mr. Holt, "to endeavour to prove the identity of the two instruments!" Surely Mr. Holt cannot for a moment imagine that the profession will allow him to take advantage of the six-year statute of limitations in this matter. It would be a *legal* defence to a tailor's bill I admit, but must not debar Perrève of the right to that justice to which he is entitled under the code of honour.

I may again assure Mr. Holt that this controversy was forced upon me by Mr. Philip Smyly, who accused me in a letter, published in this journal on the 21st November, of "misstatement" in attributing the invention of the dilator to Perrève. And if, in my refutation of Mr. Smyly's offensive term, I have clearly shown that the profession does *not* "owe" the instrument "*entirely*" to Mr. Holt, which Mr. Holt, has been now compelled to admit, he has no one to blame but Mr. Smyly.

I am at a loss for Mr. Holt's meaning, when he says that I am "more desirous of quarrelling with "my colleague," than I am "of defending my friend." Mr. Smyly is not my colleague, but whether he is or not I have no wish to quarrel with him or any one else. If he implies that Perrève is my friend he is mistaken, as the only interest I have in this matter is the cause of truth, forced upon me to maintain for the reasons I have above stated. I believe Perrève is dead. His dilator remains. Mr. Holt used it as Perrève's in 1852, and ever since that year has published and used it solely as his own invention.

Again, Mr. Holt's assertion—"So long as Mr. Richardson's patients have no objection to his preference for Perrève's instrument, I am sure I have not," comes with something like *ingratitude* from one who has been using it for so many years!

"Ingratum si dixeris omnia dicis."

And now I ask my readers what has been left to connect Mr. Holt's name with the dilator? Simply the few inches Mr. Holt cut off from Perrève's conducting rod! I do not grudge him this piece of wire. He may have it with all my heart. And in conclusion, I would recommend Mr. Holt, before he again writes a book, to read over the following dialogue from Le Sage, which took place between Asmodeus and Don Cleophas, during one of their aerial flights, and while they were looking down into the attic of the Marquis:—

"This author, then," replied Don Cleophas, "is a man of some note." "You are to judge of that yourself," answered *Le Diable;* "he is surrounded by a thousand volumes, and is compiling one in which there will not be a line of his own. He abstracts from all those books and manuscripts, and, though he only methodizes and connects his appropriations, yet he has a larger share of vanity than a real author."—I have the honour to remain, sir, your very obedient servant,

B. Wills Richardson.

AMENDMENT OF THE MEDICAL CHARITIES IN IRELAND.

TO THE EDITOR OF THE MEDICAL PRESS AND CIRCULAR.

Dear Sir,—When the "Tories" were in office a few years ago, Lord Naas, who was then, as well as now, the Chief Secretary for Ireland, introduced before the House of Commons an "Amended Medical Charities Bill," which contained some important clauses of improvements on the present unsatisfactory system. Deputations from the Irish Medical Association, including its tributary branches, waited on his lordship, suggesting some modifications, which were to be discussed before a "Select Parliamentary Committee," but the existing government having soon after retired from office, the measure was left in abeyance; under these circumstances, it seems strange to some why no active steps have been taken lately by the "Medical Protective Association," to urge on the Chief Secretary the necessity of preparing some measure to ameliorate the position of the Dispensary Medical Officers, many of whom labour under severe grievances. More than a year has already elapsed since a large meeting of the profession was convened at the Limerick Junction, in order to take into consideration the means of redressing the wrongs under which we labour, but though a considerable amount of enthusiasm and sympathy then seemed to be manifested, it is to be feared that a sort of indifference has since crept in among even zealous members, as may be surmised from the fact that we no longer hear of any public demonstrations of the same kind, with the exception of an important deputation from Sligo, to the "Chief Secretary," and which, strange to say, has not been followed by others of a similar nature. It now appears to be finally decided that the moiety of the salaries of the dispensary doctors is to be paid out of the Consolidated Fund, a desideratum long wished for, not only by Boards of Guardians, but also by the Medical Officers at large, as being likely to be fraught with strong advantages to their positions. While, as a general rule, it is to be hoped that this may prove true as regards many Poor-law Unions, still it is to be feared that exceptional cases will arise wherein Boards of Guardians, notwithstanding the reduction of taxation, will be not a whit more desirous to consult for the welfare of their medical officers, so great is their sordid spirit of economy. In the County of Cork, within the last few years, the salaries have been considerably raised, in the vast majority of the unions, even to the extent of £100 per annum; but in the union to which I have had the *good fortune* to be connected with, all attempts on the part of the dispensary physicians to have their salaries raised above the standard of £70 a-year, have been met with ungenerous opposition, and I have reason to believe, that under the *new regime* the feelings of several of these *soi disant* guardians of humanity would not be much altered for the better. In order, therefore, that the contemplated transfer of half the salaries to the Consolidated Fund shall be regarded as a general boon to the profession connected with the poor-law, experience and a sense of equity point out the necessity of investing some central governing body with the powers of regulating the standard of salaries and withdrawing them from local boards, and that a golden opportunity will be soon at hand for coming to some arrangement of the kind may be possible before the Chancellor of the Exchequer is about to explain the estimates connected with his "Budget." Would it not be highly expedient, therefore, that meetings of the Medical Association be immediately commenced in order to take active steps to urge on the Legislature the necessity of effecting some changes in the administration of the "Medical Charities Act," so loudly called for, not only in the interests of the dispensary doctors, but also those of the sick poor. Deputations should wait not only on the Chief Secretary, but memorials signed by the body of the Poor-law Medical Officers, numbering nearly 800, should be forwarded to both Houses of Parliament, praying for some measure of redress for their grievances. If the present government, however, should show no friendly disposition to yield to our representations, then it would behove us at the next election (which, in the opinion of sagacious observers, is not remote) to use our influence against the return of any candidates who would not pledge themselves to espouse our cause, irrespective of political parties. As agitation is now a powerful engine of success in this unsettled age, why should the medical profession stand exceptional to other social bodies of the state, in not making strong efforts to obtain justice and equality.—Yours truly,

A Dispensary Physician.

HEALTH RESORTS.

TO THE EDITOR OF THE MEDICAL PRESS AND CIRCULAR.

Sir,—In last week's number of The Medical Press and Circular, I observe a letter on the subject of health resorts, signed "One who has Ceased to be a Wanderer." The writer of this letter states that his remarks on the effects of change of climate are the result of his experience of several successive winters passed on the Riviera, between Marseilles and Genoa, and he sums up the conclusions he has arrived at by that experience in the following words:—

"On the whole, I give it as my opinion, judging from experience, that if the people would make up their minds to stay quietly at home, keep their houses warm and dry, and not go out in bad and treacherous weather, they would be quite as well in their own country. . . . . It would be well if this fashionable mania, which invariably engenders a restless spirit, satisfied with nothing and contented nowhere, could be put an end to. People would then find out that they are as safe by their own fireside as elsewhere, and that they are able to enjoy the comforts that no other country can afford. . . . . In fact, if so disposed, there are several nicely-sheltered places in England, where they might very advantageously and safely pass the winter months without the fatigue, and in many respects the inconvenience, of going abroad."

As this letter appears to me calculated to do harm, by de-

preciating the value of one of the most important therapeutic agents that can be employed by a physician in the treatment of some of the most serious chronic diseases for which medical advice is sought, may I request you will allow me space for a few remarks in reply to it.

Your correspondent, "One who has Ceased to be a Wanderer," claims for himself extensive "personal knowledge and observation" on the subject of change of climate, and therefore, before replying to his observations, I may also claim for myself some share of that personal experience which he boasts of. I, too, have studied change of climate practically, not merely, as your correspondent appears to have done, "at different places along the Riviera," but in Southern Spain and Portugal, France, Italy, Algeria, and Egypt, to the health resorts of which countries I have in several cases made repeated visits, and in others have resided during the winter. The results of that experience have led me to very different conclusions from those of "One who has Ceased to be a Wanderer." I would go so far as to state that, in the treatment of certain intractable chronic ailments, there is no single remedy of equal efficacy with a judicious change of climate; that is, change to a climate suited for the special exigencies of the disease we have to treat, and this change must be assisted by other appropriate remedies. The diseases which my experience of the various parts of Europe and Africa that are resorted to by invalids from these islands in winter, convinces me we may derive benefit from change of air are numerous. They include nearly all chronic pulmonary diseases, especially phthisis, chronic bronchitis, laryngitis, asthma, both humoral and dry, chronic rheumatism, dyspepsia, hypochondriases, and many other chronic complaints. It must be obvious that diseases so different from each other must require treatment as different; and this variety of treatment by change of climate may be obtained in the various southern winter resorts, frequented by invalids, each of which presents some peculiarity of climate by which it may be distinguished from other places of the same kind. Moreover, the different forms and stages of the same disease often require climates as different as though they were distinct maladies.

These very obvious principles of medical climatology are altogether ignored by "One who has Ceased to Wander," for he uses the term health resort as though it were a specific term, employed always to express the same thing. I fully agree with what your correspondent says about the climate of Mentone, but may observe that in my work "On Change of Climate," pp. 306-310, and in my essay "On the Climate of Malaga in the Treatment of Chronic Pulmonary Diseases," p. 5, which were published, the first in 1864 and the second a year later, I pointed out very fully the disadvantages of the climate of Mentone as a winter residence for pulmonary invalids, which "One who has Ceased to Wander" has since discovered.

The subject of the remedial influence of change of climate is a very large question, and neither your space nor my leisure allow of its discussion at present. But, as the evident tendency of the letter of "One who has Ceased to Wander" is to decry the efficacy of changes of climate in cases of pulmonary consumption, a few practical remarks on this point may be of some interest to those who have read your correspondent's letter.

Of all the remedial measures which I have seen employed in the treatment of phthisis, the two from which I have known most benefit derived were cod liver oil and change of climate. My observations here are confined to the latter of these. There are two leading varieties of phthisis, and these require very different climates. In the first and most frequent our patients are persons of a relaxed, anæmic, and scrofulous constitution, who complain of profuse expectoration, cough, and colliquative sweating and diarrhœa. This class of consumptive invalids require what is described as a "tonic winter climate;" that is to say, a winter resort, the atmosphere of which is warm, dry, bracing, and not subject to great or sudden variations either of temperature, pressure, or force of the wind. The principal climates of this kind which I have visited are Egypt, especially the upper part of Middle Egypt, Western Australia, Nice, and Hyères, the Mediterranean, Coast of Spain, and most especially *Malaga*, where I prefer to send the majority of those who require a climate of this class. Indeed, I have every reason to speak highly of the climate of Malaga, both from my own experience and that of patients whom I have sent there.

The second form of consumption to which I have alluded is less frequent than the first. Its characteristic features are dry, hard frequent cough, hæmoptysis, quick thready pulse, and slight expectoration. Cases marked by these symptoms require a sedative climate; that is, a climate the principal points of which are a humid, warm, and somewhat relaxing atmosphere. The principal climates of this class which I am acquainted with, are Pisa, Madeira, and Rome. Algiers, where I passed a great portion of one winter, holds, I think, a position between the two classes of climate I have described. Each of these climates has its special advantages in some cases in which any other climate might probably be more injurious than beneficial.

I need hardly add that the earlier in the course of the disease a consumptive patient is sent to a suitable climate the greater is the probability of his recovery; but even when the disease had advanced so far that the patient presented all the physical signs as well as the symptoms of a small cavity, I have seen the progress of the disease apparently arrested for a time, and have known a great improvement in the patient's general health and strength result from a suitable change of air. In such cases, however, the improvement was often very transitory, and the disease again resumed its progress. No one can be more impressed with a feeling of the cruelty of sending a patient far advanced in the third stage of phthisis abroad, for it has too often fallen to my lot to attend consumptive invalids in Malaga and elsewhere, who had been sent abroad either too late or to an unsuitable climate.

"One who has Ceased to be a Wanderer" speaks of change of climate to foreign winter resorts as "a fashionable mania which invariably engenders a restless spirit, satisfied with nothing and contented nowhere." This I am sure a little reflection will convince your correspondent is a hardly deserved manner of speaking of a remedy which is chiefly resorted to as a last resource by those who have little other hope of recovery from a disease, the victims of which are so frequently the young, the beautiful, and the intellectual.

With regard to the comparative merits of British and foreign winter resorts, it would be easy to answer the arguments of your correspondent, but I have trespassed already longer on your space than I should have done were it not for the importance of the question at issue.—I am, sir, your obedient servant,

THOMAS MORE MADDEN, M.R.C.S.Eng., L.K.Q.C.P.I.

LONDON SURGICAL HOME.

TO THE EDITOR OF THE MEDICAL PRESS AND CIRCULAR.

SIR,—I am directed by the two senior surgeons, Mr. Baker Brown and Mr. Philip Harper to state that, *solely* in deference to the opinion of THE MEDICAL PRESS on the subject of clitoridectomy, they have determined not to perform the operation in this institution pending professional inquiry into its validity as a scientific and justifiable operation. An early insertion of this note in your journal will oblige your obedient servant,

WOLLASTON F. PYM, Secretary.

THE WEATHER AND THE PUBLIC HEALTH.

(From the Registrar-General's Returns.)

THE deaths registered in London during the week ending Feb. 2nd, were 1628. It was the fifth week of the year, and the average number of deaths for that week is, with a correction for increase of population, 1600. The deaths in the present return exceed the estimated number by 28.

The deaths have fallen from 1180 in the previous week to 1628, as the weather has grown milder, and now we have fortunately passed the coldest month of the year. The reduction in the number of deaths as winter has relented is visible at every period, except the last age of all (30 to 100 years), at which 100 deaths were recorded.

The diseases of the lungs grew frequent and fatal, but have now declined. Thus the deaths from bronchitis in the six weeks were at first 224 and 178, then, as the effects of severe frost accumulated, 375, 308, and 399, falling down finally this week to 271.

No death from cholera has been registered for a fortnight but the deaths from diarrhœa have increased. While the epidemic of scarlatina is declining small-pox is increasing, and last week 55 persons died of the disease in London—22 in the north (where the Small-pox Hospital is situate), 13 in the east, and 16 in the south districts.

The deaths returned last week in London and in twelve other large towns of the United Kingdom furnishing returns showed a decrease of 586, upon those of the previous week; of this decrease 252 occurred in London, 107 in Liverpool, 110 in

Manchester, and 63 in Glasgow. In Dublin alone was shown a further considerable increase upon recent weeks; the 286 deaths exceeded by 129 the corrected average weekly number, and included 102 fatal cases of bronchitis.

The annual rate of mortality last week was 21 per 1000 in London, 30 in Edinburgh, and 47 in Dublin; 31 in Bristol, 26 in Birmingham, 30 in Liverpool, 32 in Manchester, 31 in Salford, 29 in Sheffield, 32 in Leeds, 30 in Hull, 32 in Newcastle-upon-Tyne, and 35 in Glasgow. The rate in Vienna was 27 per 1000 during the week ending the 26th ult., when the mean temperature was 11·1° Fahrenheit lower than in the same week in London, where the rate was 32.

SOUTH DUBLIN UNION.

Sir Robert Shaw, Bart., in the chair.

A report was brought up from the finance committee recommending that renumeration should be given to the medical officers of the South City Dispensary Medical Staff, at the rate of one guinea per night for each night's duty performed by them during the prevalence of cholera.

Alderman Bonsall had no objection to the proposed remuneration to the medical officers, with the exception of two of them, who persistently set the order of the Board at defiance, and refused to sleep in their turn at the dispensary.

Mr. Byrne explained that the law did not compel the medical officers to sleep at the dispensary. The two gentlemen alluded to by Alderman Bonsall performed all the duties well and efficiently, and in some cases their remaining at their own residences was an advantage to the public, who very soon learned that these medical gentlemen were to be found in their own houses. He (Mr. Byrne) would certainly not vote for withholding the remuneration from the gentlemen in question, both of whom had performed their duty efficiently and well.

Dr. Owens hoped that this would be a lesson to the Board not to make rules which the law did not enable them to enforce.

Mr. Macready was decidedly in favour of not now making a difference between the medical officers. It was when the rule was violated that the two doctors should be held amenable, and not now when an interval so long had elapsed.

Alderman Bonsall moved his proposed amendment against paying the two gentlemen in question the proposed remuneration.

The amendment having been lost, Mr. Guinness moved that the two gentlemen should only get fifteen shillings per night for their attendance, which was carried.

A gratuity of £30 was ordered to Dr. Grant for his services during the prevalence of cholera, as resident apothecary of the workhouse. Several other gratuities to the house officers were also ordered in various small sums.

The Board, having transacted the routine business, then adjourned.

LONDON FEVER HOSPITAL.

On Friday last the annual meeting of the Governors of this Institution was held, and the report presented. It appears that the number of patients admitted last year, 3577 was greater, with one exception, than in any year since the foundation of the hospital, and during the last five years the number admitted has been 15,351, or nearly one-half as many as during the previous 60 years. Of the 3577 patients admitted during the year, 2897 were suffering from true specific fevers, and 90 from cholera, while in 590 the febrile symptoms were the result of local disease. The fevers treated in the hospital besides other acute diseases, cholera and smallpox (59 with the latter disease admitted because the Smallpox Hospital was full), were typhus, enteric, scarlet, measles, and simple febricula. Typhus, the fever the prevalence of which is connected with overcrowding and destitution, had prevailed to an unprecedented extent during the last five years; but last year the numbers with this fever were less than in 1864. A large proportion of those admitted with typhus had been out of employment and in a very destitute state for a long time prior to the attack, and the localities from which they were mainly brought were the poorest and most overcrowded. Of the 1735 typhus patients, St. Pancras sent 232; Bethnal-green, 176; Whitechapel, 156; and St. Luke's (Old-street), 156. One fact was shown, with regard to this epidemic—namely, that during this year it was more generally distributed throughout the metropolis than when it commenced in 1861. The enteric fever an endemic rather than an epidemic disease, due, it was believed, to bad drainage, had risen during 1865 and 1866 from an average of 181 to 520 and 575, an increase which was ascribed in a great measure to certain climatic influences. Of the 3577 admitted during the year, 2890 had been discharged recovered, 55 had been sent to other hospitals, and 658 had died. This high death-rate was explained to be owing to the fact that a great many patients were sent to the hospital in a dying state. The committee had sold out a third of its small funded property in order to erect a new wing, and by doing this no case of fever had been turned from its doors during the last three years. Five of the attendants had died—four nurses and the resident medical officer—through fever contracted while at their duty. Mr. Taverner moved the adoption of the report, and said he thought if the great work the hospital performed were generally known, the inhabitants of London would not rest contented with allowing its list of annual subscriptions to amount to only £600, especially when a guinea a-year was all the payment required to constitute a governor. Dr. Jeafferson seconded the adoption of the report, which was carried, and a vote of thanks, moved by Mr. Low, and seconded by the Rev. C. C. Collins, was carried to Dr. Murchison for the report. On the motion of Mr. Hugh Owen, of the Poor-law Board, the Earl of Devon was re-elected President, and the other officers were also re-elected. Votes of thanks were given to Mr. Owen, for acting as hon. secretary; to the chairman, and to Mr. Robinson, a member of the committee.

Medical News.

The Prince of Wales is to be invited to act as President of St. Bartholomew's Hospital.

A Royal decree has been issued from Brussels provisionally prohibiting fairs and markets for cattle of all kinds.

Cattle Plague.—One attack of cattle plague is reported during the week ending January 26th, being a decrease of ten on the previous return. This was a fresh outbreak of the disease, and occurred on a farm in the petty sessional division of Middle Holderness, Yorkshire East Riding; the animal attacked, a bull, was killed by order of the inspector. No healthy cattle were slaughtered from having been in contact with infected animals. The report for the week ending February 2nd states that on January 28 the disease appeared among the stock of a dairykeeper at Islington, in the Finsbury district of the metropolis, and during the week attacked 28 of the 46 cattle on the premises. The whole of the animals, whether diseased or healthy, have been killed. The number of animals attacked in Great Britain since the commencement is 253,860, and 52,641 cattle in the aggregate have been slaughtered healthy to prevent the spread of the disease.

Academie de Medecine.—M. Legouest, the distinguished military Surgeon, was at the last meeting elected a member in the section of Operative Medicine. The other candidates were MM. Chassaignac, Demarquay, A. Guérin, Giraldés, and Verneuil.

The Frankfort police has forbidden the sale of the fabric known as the green tarlatan, as it is dyed by colours composed in great part of arsenical preparations, and is consequently very injurious to health.

ROYAL COLLEGE OF SURGEONS, LONDON.—The following members of the college, having undergone the necessary examinations, were admitted licentiates in midwifery at a meeting of the Board on the 6th inst. :—

Messrs. Arthur Hensman, Northampton, diploma of membership dated Nov. 14, 1866; Joseph Arthur Williams, M.D., Victoria College, Toronto, Culloden, Canada West, Jan. 22, 1867; Eli James Barrick, M.D., Victoria College, Toronto, Jan. 22, 1867; John Cascaden, M.D., University, Toronto, Jan. 23, 1867; Titus Cummins Crooker, M.D., Victoria College, Toronto, Jan. 23, 1867; John Arnold, L.R.C.P.Lond., Demerara, Jan. 24, 1867; William James Hunt, L.R.C.P.Lond. and L.S.A., Hoxton, March 28, 1858; Rowland Hill Coombs, L.S.A., Bedford, July, 26, 1866; William Draper, Grantham, May 9, 1865; James D'Arcy Harvey, Plymouth, Nov. 15, 1865; and John Widmer Rolph, M.D., Victoria College, Toronto, not a member of the college. Professor Hilton, F.R.S., the senior vice-president of the college, will deliver the Hunterian oration on Thursday next in the theatre of the college.

DR. MASSINGHAM has been reinstated in his parochial appointment by the Bethnal-green.

THE Faculty of Paris recently met in order to make a choice among the candidates for the chair of Surgical Pathology. M. Broca, M. Follin, and M. Verneuil were successively elected, and are to be presented for nomination to the Minister of Public Instruction.

A MEETING of the Council of the Metropolitan Poor-law Medical Officers' Association was held on Friday, February 8th, at 8 P.M., for the purpose of taking into consideration the report of a sub-committee on a uniformity of dietary in the Metropolitan union-houses, and generally to discuss the prospects of Poor-law Medical reform in the forthcoming session. As Mr. Hardy intends to bring in his bill on that day, the Council will arrange to meet *de die in diem*, so as to be prepared to take immediate action, should the interests of their body appear in any way to be imperilled. As a substantial measure of Poor-law Medical reform is anticipated, it is very desirable that all Metropolitan Poor-law Medical Officers should join the Association. Those that have not already done so may send in their names to F. Godrich, Esq., West Brompton, treasurer; T. O. Dudfield, Esq., 8, Upper Phillimore-terrace, Kensington, hon. sec.; or Dr. Joseph Rogers, 33, Dean-street, Soho, president.

ODONTOLOGICAL SOCIETY.—At the usual monthly meeting on February 4, the new President, G. Ibbetson, Esq., delivered his inaugural address, and a paper was read "On the Use of Carbolic Acid in the Treatment of Diseased Teeth," by James Bate, Esq., of Brighton. At the previous meeting of the Society a hearty vote of thanks was unanimously passed to the retiring President, Mr. W. A. N. Cattlin, the proposer of which observed that though Mr. Cattlin now chiefly practised at Brighton, he had never once allowed the distance from town to prevent his taking the chair at the Society's meetings throughout his year of office.

SOCIETY FOR RELIEF OF WIDOWS AND ORPHANS OF MEDICAL MEN.—At a meeting of the above Society, held on Wednesday, the 30th January last, George Burrows, M.D., was elected President, in the room of Martin Wane, Esq., resigned. Also, H. A. Pitman, M.D., was elected a Vice-President, instead of Dr. Burrows, and Dr. Fuller, a Director, vice Dr. Pitman.

PRESENTATION TO THE RESIDENT PHYSICIAN OF THE BRITISH GENERAL HOSPITAL.—On the 30th ult. the students of the British General Hospital held a meeting for the purpose of expressing their regret at the resignation of Dr. Walter Harris, late House-Physician, and at the same time presented him with a gold watch, in token of their esteem and regard.

THE receipts from the working of the Atlantic Telegraph Company, up to the present time, have averaged £813 a day, including Sundays; since the reduction in the price of messages from £20 to £10, the average has risen to £874.

THE report of the Inland Revenue states that coffee is largely adulterated with finings, which is simply burnt sugar or caramel, of about one-third the cost of duty paid coffee. The same report states that glucose is largely imported for the adulteration of confectionary and preserves.

A SURGEON'S assistant of the name of John Fisher committed suicide a few days since at Huddersfield. The coroner's jury returned a verdict of "Temporary insanity."

THE *Edinburgh Courant* intimates the death of Dr. Scoresby-Jackson, a nephew of the celebrated Arctic voyager, whose life he wrote. He was the author of several medical works, including one on "Climate," and another on "Materia Medica."

AN inquest has been held at the London Hospital on a child who was bitten by a dog on December 27th, and was discharged from that hospital, after three weeks' treatment, as well; but symptoms of hydrophobia having subsequently set in, it was sent back to the hospital, where it died, The jury, after hearing evidence, returned a verdict of "Death from bite of dog."

AMONG the samples of adulterated tobacco examined lately at the Inland Revenue Laboratory were several containing liquorice, others fermentable sugar, and some tannic acid, sulphate of iron, and logwood, whilst one sample of "roll" sent from Scotland actually consisted of oakum, covered with a thin wrapper of leaf tobacco, and was, from its outward appearance, indistinguishable from genuine tobacco. The principal of the laboratory gives the weight of tobacco yearly consumed per head of the population at one pound four and three-quarter ounces, which shows a continuous increase during the last twenty years.

THE CASE OF SHOOTING A SURGEON.—At Jersey, last week, Thomas Roberts, who was lying in gaol on a charge of attempted murder, committed suicide by hanging. The deceased about two years ago was an inmate of the General Hospital at St. Helier's, Jersey, and was attended for a bad leg by Mr. Charles Le Vesconte Godfrey, surgeon to the establishment. He was discharged and sent to England, where his leg becoming worse, he had to submit to amputation, much against his will. He returned to Jersey a short time ago, and made no secret of his animosity to Mr. Godfrey, whom he blamed for the loss of his leg, alleging that he had not had proper treatment from him. He had often been heard to utter threats against him. On the 6th December, as Mr. Godfrey was crossing the Parade, after paying his morning visit to the hospital, he was shot at by Roberts who was concealed behind a tree. The charge took effect in his left shoulder, and brought him to the ground. He lost a great quantity of blood, but recovered in the course of two or three weeks. Roberts expressed his sorrow that he had not killed him. Since his committal he had frequently declared to the turnkeys that he would never leave the island, and would rather hang himself. On Tuesday morning, when his cell door was opened at seven o'clock, he was found hanging quite dead. He had made use of his braces and a leathern strap, which he used for fastening his wooden leg to his stump. The braces were round his neck, and the strap fastened to a large spike rail in the wall. Deceased had formerly been a sailor, and was about 45 years old.

Notices to Correspondents.

Dr. Dickie, of Alloa, has forwarded to us a correspondence between him and Dr. Brotherston anent the following dispute:—On Dr. Dickie's authority a statement appeared in a daily paper that cases of cholera had occurred in the town. Dr. Brotherston, the Medical Officer of Health, contradicts the statement in the following words:—

"Having made inquiry as to the reputed cases of cholera referred to, I find that they were not cases of Asiatic cholera at all, but that the parties died from other diseases."

Not having seen the cases or consulted Dr. Dickie, who had attended them, but basing his conclusion simply on the neighbours' hearsay. Furthermore, Dr. Brotherston makes the countercharge:

"That Dr. Dickie was one of those appointed by the local authority to make a house-to-house visitation, and, as such, was bound, according to the 7th clause of the Order issued by the Board of Supervision, to intimate to the Medical Officer the name and place of abode of every person affected with diarrhœa."

Dr. Dickie, in accepting the office of House Visitor, bound himself, in our opinion, to report the existence of diarrhœa to Dr. Brotherston, and was morally, if not legally, wrong in omitting to do so.

Dr. Brotherston was altogether unjustified in publicly contradicting the statement of a medical brother on no better authority than old woman's diagnosis, and, in our opinion, Dr. Dickie had just cause of complaint. From any evidence which Dr. Brotherston shows to the contrary, we think the cases were cholera.

The matter is hardly worth so much paper and ink, and might have been much more satisfactorily settled by a little professional cordiality.

MEDICAL SERVICES AT CORONERS' INQUESTS.

TO THE EDITOR OF THE MEDICAL PRESS AND CIRCULAR.

Dear Sir,—Will you kindly oblige me with your opinion what course to adopt in the following case, or if I have any remedy to prevent the like being repeated:—

On Sunday night, the 27th ult., about ten o'clock, two of the constabulary came to my house from Killeter, a distance of four miles, where my dispensary is situated, saying an infant child was found there that day in the river dead, and that the sergeant requested my attendance in the morning between ten and eleven o'clock to meet the coroner, who lives near Strabane, a distance of eight miles. I accordingly drove there in the morning, viewed the body and was in waiting more than an hour before the coroner arrived; when I met him he informed me that he had called upon another Medical Officer on his way coming ("from another dispensary district whom he had often brought before into my dispensary district") and that he was coming after him, therefore he would not require my services, which I consider very unjust treatment, for it greatly interferes with the due administration of justice, as I was most likely to know of any cases of suspicion being in the district; and upon referring to the Medical Relief Register, I find several cases which I had strong reason to suspect being in a state of pregnancy, but the course the coroner adopted prevented me having a word to say in the matter.

Now, Sir, I would like to know if the coroner has power to employ any doctor he pleases from any other district in such cases. An answer will greatly oblige your obedient servant, X.

[Favouritism of this sort is too common, and is altogether contrary to the spirit of the law. There is no legal obligation on the coroner to call in the medical officer of the dispensary district, but we think our correspondent is entitled to his fees on the ground that he was officially required to attend by the sergeant on duty.—Ed. M. P. & C.]

ASPHYXIA FROM CARBONIC ACID.

TO THE EDITOR OF THE MEDICAL PRESS AND CIRCULAR.

Dear Sir,—Any explanation you may give as to the probable cause of death in the following case will much oblige:—I lately attended an inquest, and from the evidence given it appeared the conditions under which the deceased died were these:—One night during the late severe frost, when deceased was going to bed, he took with him in a "frying-pan" some red *turf-coals*, and laid the frying-pan on the floor near the bed. The room was a small one, ceiled over head, the door and window were very nearly air-tight, and there was no flue or chimney There was no evidence as to the exact quantity of turf used, further than that it was stated there was but little ashes in the pan, but that the turf used gives comparatively but little ashes. Deceased was found dead in his bed next morning. There was some mucus about the mouth, but no appearance of a struggle. I attended the man about two months previously for an ordinary "cold," from which he quite recovered, and I am able to state that he was free from cardiac and other organic diseases. A week after death the body presented no appearance of apoplexy. The man was about 26 years of age, a labourer by occupation, and never regarded by himself or his neighbours as a delicate man. There was *no smoke* in the room when the door was opened in the morning. I thought carbonic oxide might be produced under the circumstances, but the coroner did not think it could. Any light you may throw on the matter will much oblige, yours truly, A Subscriber.

[The case appears to have been one of carbonic acid poisoning—a common occurrence in the close cabins of ships. Did the persons who discovered the body in the morning suffer from asphyxia symptoms, or was there time for the effluvia to escape before their entry?—Ed.]

THE EDITOR OF THE MEDICAL PRESS AND CIRCULAR.

Dear Sir,—I beg a tiny space, just to thank "Speculum" and your other correspondent for their kind replies to my note, and also to inform them that my late distracting symptoms now prove not to have sprung from any morbid condition of the internal ear, nor from accumulated cerumen, but from a small chronic abscess external to the tympanum, which, having at length suppurated, my conscience, sir, will no longer allow me to subscribe myself, yours truly, Miser.

MEDICAL VACANCIES.

Bristol General Hospital.—House-Surgeon and Assistant House-Surgeon.

Chapel-on-le-Frith Union.—Medical Officer and Public Vaccinator.

Cardigan Union.—Medical Officer.

Reading Medical Dispensary.—Resident Surgeon.

Stockport Infirmary.—House-Surgeon.

Wakefield Lunatic Asylum.—Junior Assistant Medical Officer.

MEDICAL APPOINTMENTS.

Eaton, F. B., L.R.C.P.Ed., has been appointed Medical Officer for the Nuneaton District of the Nuneaton Union, Warwickshire, vice O. F. Wyer, M.R.C.S.E., resigned.

Green, J., L.R.C.P.Ed., has been appointed Medical Officer for the Middle District of the Patrington Union, Yorkshire, vice T. A. M'Manus, M.R.C.S.E., resigned.

Gwydia, R. C., M.R C.S.E., has been appointed Medical Officer, Public Vaccinator, and Registrar of Births, &c., for the Drumlish Dispensary District of the Longford Union, vice W. L. Watkins, L.K.Q.C.P.I., resigned.

Hay, Dr., W. H., of Bridport, Dorset, has been appointed by the Lord Chancellor a Magistrate for the Borough of Bridport.

Little, R., M.D., has been appointed Medical Officer, Public Vaccinator, and Registrar of Births, &c., for the Toome Dispensary District of the Ballymena Union, County Antrim, vice C. Atkinson, L.F.P.&S.Glas., resigned.

Anderson, J. G., L.R.C.P.Edin., L.S.A., L.M., has been appointed Resident Obstetric Officer to St. Mary's Hospital, vice Thurgar, term of office expired.

Meade, Warren, L.K.Q.C.P.I., M.R.C.S.E., L.M. Rotundo Hospital, Dublin, has been appointed Medical Officer to the Cloyne Dispensary, County Cork; also to the Constabulary and Coastguard Stations in the District.

Muriel, R., M.R.C.S.E., has been appointed a Surgeon in Ordinary to the Ely Dispensary, vice A. Davies, M.D., resigned.

O'Connor, W. J. A., L.R.C.P.Ed., has been appointed Medical Officer, Public Vaccinator, and Registrar of Births, &c., for the Spiddal Dispensary District of the Galway Union, vice R. J. Morgan, L.R.C.P.Ed., resigned.

Sinclair, Dr. G. M., has been appointed a Surgeon in Ordinary to the Ely Dispensary, vice A. Davies, M.D., resigned.

Somer, J., M.R.C.S.E., has been appointed Medical Officer for the Broadclist District of St. Thomas's Union, Devon, vice F. H. Collings, M.R.C.S.E., resigned.

Sterling, H. H. J., M.R.C.S.E., has been appointed Resident Medical Officer to the Metropolitan Free Hospital, Devonshire-square, vice C. Smith, M.D., resigned.

Swanson, G. J., M.D., has been appointed one of the Ordinary Medical Staff of the Edinburgh Dental Dispensary, vice R. Nasmyth, F.R.C.S.E., resigned (but who still retains office as Consulting Surgeon-Dentist).

Verdon, J. J., L.K.Q.C.P.I., has been appointed Medical Officer, Public Vaccinator, and Registrar of Births, &c., for the Howth Dispensary District of the North Dublin Union, vice J. Rorke, L.K.Q.C.P.I., resigned.

Wadham, Dr. W., has been appointed Examining Physician to the Queen's Foreign and Home-service Messengers.

Wright, G., M.B., C.M. Aberd., has been appointed Medical Officer and Public Vaccinator for District No. 11 of the South Molton Union, Devonshire, vice G. Allarton, M.R.C.S E, resigned.

Woodman, J., M.R.C.S.E., has been appointed Medical Officer and Public Vaccinator for the Eastern District of the Exeter Incorporation of the Poor, vice A. J. Cumming, M.R.C.S.E., resigned.

MEDICAL DIARY OF THE WEEK.

Wednesday, Feb. 13.

Royal College of Surgeons of England.—4 p.m. A Lecture, by Professor Huxley.

Thursday, Feb. 14.

Royal Institution.—3 p.m. Professor Tyndall, "On Vibratory Motion, with Special Reference to Sound."

Friday, Feb. 15.

Royal College of Surgeons of England.—4 p.m. A Lecture, by Professor Huxley.

Royal Institution.—8 p.m. C. F. Varley, Esq., "On the Atlantic Telegraph."

Births, Marriages, and Deaths.

Announcements are inserted without charge, and must in all cases be authenticated with the signature of the sender.

BIRTHS.

Fernie.—On the 4th ult., at Upton-on-Severn, Worcestershire, the wife of James Fernie, M.R.C.S.E., of a daughter.

Wood.—On the 26th ult., at Newton Abbott, the wife of Dr. J. Hurd Wood, of a daughter, still-born.

Peacock.—On the 28th ult., at Ford Cottage, Churchinford, Devon, the wife of A. L. Peacock, M.R.C.S., of a son.

Shepheard.—On the 31st ult., at North Walsham, Norfolk, the wife of John Shepheard, M.R.C.S., of a son.

Olive.—On the 31st ult., at Northampton, the wife of Eustace Henry Olive, M.R.C.S.E., of a son.

Brown.—On the 2nd inst., at Earlswood, Nottinghamshire, the wife of E. A. Brown, M.D., of a son.

Moxey.—On the 4th inst., at Edinburgh House, Turnham-green, the wife of D. A. Moxey, M.D., of a a daughter.

Davis.—On the 4th inst., at Abbey-gardens, St. John's-wood, London, the wife of Assistant-Surgeon Wm. Farquar Davis, M.D., H.M.'s Madras Army, of a son.

MARRIAGES.

Mackay—Pilch.—On the 31st ult., at Walker, Northumberland, J. T. Mackay, M.R.C.S.E., to Joanna, daughter of Captain Pilch, of Lowestoft.

Beviss—Holmes.—On the 5th inst., at Park-circus, Glasgow, Charles Beviss, M.D., of London, to Jane, daughter of the late James Holmes, Esq., Manufacturer, Paisley.

DEATHS.

O'Reilly.—On the 17th ult., at New York, Dr. Bernard O'Reilly, formerly of Dublin, aged 65.

French.—On the 23rd ult., Henry Joseph French, L.R.C.P.Ed., of the Wandsworth-road.

Eardley.—On the 25th ult., John Eardley, L.R.C.P.Ed., of Charles-street, Westbourne-terrace.

Mason.—On the 28th ult., at Horninglow-street, Burton-on-Trent, William Mason, Surgeon, aged 65.

Woodifield.—On the 29th ult., at Killorglin, County Kerry, A. H. Woodifield, M.D., aged 38.

Russell.—On the 31st ult., at Toulouse, W. T. Russell, M.D., aged 89.

Hewson.—On the 2nd inst., John Hewson, F.R.C.S.E., of Lincoln, aged 67.

Jones.—On February 1st, at Foxley, West Bewdley, after a lingering illness, over two years, Wm. Allen Jones, Esq., M.R.C.S.E. and L.S.A., in the 41st year of his age.

Vesey.—Died at Bombay, Richard Murray Vesey, Staff Assistant-Surgeon, H. M. Indian Army, youngest son of the late Rev. George Vesey, of Inniscarra, Cork, aged 23.

Original Communications.

CLINICAL LECTURE

ON CASES OF

INFLAMMATION, DEPENDING CHIEFLY ON NEURO-VASCULAR DISORDER.

By C. HANDFIELD JONES, M.B.Cantab., F.R.S.

I HAVE selected from my records for our consideration to-day some cases, where well-marked inflammatory phenomena occurred in parts accessible to ocular inspection. These will serve to put before our minds, if we study them carefully, some of the most important features of the process; and that in a more striking manner than is possible when internal organs are affected.

Case 1.—J. T., æt. 35, a tall, strongly-made man, was admitted June 11th, 1859. He was a discharged soldier who had fought all through the Crimean war, and escaped unhurt by sword or disease, or the terrible privations of that bitter winter. After leaving the Crimea, his regiment went to Cephalonia, where ophthalmia was endemic, and he and many of his comrades got the disease; some became blind. Strong caustic, he reports, was freely used to the eyes, and always made his worse. For some time he was at Kilmainham Hospital, in Dublin, and was discharged from thence with a small pension. After that he had been in a London hospital two months, but was not benefited. When I saw him he had very marked corneitis, the corneae were opaque, their surface traversed by red vessels, there was some conjunctivitis, his sight was very defective, he could scarcely guide himself about. Since some hot thundery weather he had become worse. His general health was very good. He remained under my care till June 11th, 1860, exactly a year, when I had the pleasure of seeing him quite capable of earning his own maintenance as a groom. Three months later the state of the corneae is thus described in my notes:—"The right is quite clear, a small speck of opacity remains in the centre of the left." Since then I have seen him occasionally, and I believe the recovery continues permanent. The remedies employed were very various, and for a long while the struggle with the disease was doubtful and obstinate. The ground gained was lost over and and over again, as change of weather to wet, or some other slight cause, deranged the vital actions which were beginning to resume their normal play. Had he not been inured to discipline, and had not my sympathy for a brave fellow who had fought hard and suffered much determined me to persevere, and to hope even against hope, his chance of regaining useful vision was indeed small. Quinine in gr. v.—x. doses *ter die*, quinine with iron, ammon. carb. potass. iodid., oleum terebinthinæ, arsenic, guaiacum, strychnia, oleum morrh., opium, nitric acid, and bark, tannin were employed internally; and externally I used collyria of lead, alum, borax, tannin, silver, hydrocyanic acid vapour, blisters to the forehead, and dry cupping to the temples and neck. Of all these I have no hesitation in stating that tannin was the most useful by far. It was given in large doses, gr. xx.—xxx. *ter die*. By November 8th, that is, in about four months, the relapses were much shortened; instead of lasting seven or eight days, they were over in two or three. After being omitted some two months and half, the tannin was resumed in February, and continued until the end of the treatment in May. Some stomach disturbance was occasioned at one time, but it does not seem to have continued. The history affords a tolerably good example of what may be accomplished by persevering treatment with an obedient confiding patient.

Case 2.—J. R., æt. 30, smith, admitted May 19th, 1864. Has been ill five or six years with an eruption on the face, consisting of an aggregation of imperfect pustules covered with thin scabs, seated on a surface pretty uniformly affected with deep red congestion. The hair-bearing parts of the integument, the chin, cheeks, upper lips, and the eyebrows were the seats of the disorder, the hair growing on them was much thinned. The face felt very hot and itching; if he exerted himself, he stated, that his face became very red, "all a mass of blood." The least excitement caused flushing. Soap made the eruption worse, and so did constipation of the bowels. His pulse was very weak, he was languid and below par; he had abstained from beer for six months. During nine months he had been a patient at the Blackfriars' Hospital, but had not benefited. On microscopic examination I was unable to detect any parasitic growth around the roots of the hairs which were firmly implanted in their follicles. It was evident that the minute pustules were formed around the hairs, where they had fallen out there was much less eruption. He continued under my care till about the end of January, 1865, *i.e.*, rather more than eight months, and was then discharged almost perfectly recovered. The chief remedies employed were arsenic, quinine, and a combination of iron, strychnia, and sulphate of magnesia. The arsenic was given for about five months, and the dose was increased to ℥ xv. of Fowler's solution *ter die;* the chloride and simple solution were also used part of the time. It was certainly very beneficial, but hardly so much as the combination above-mentioned, which dissipated the persistent hyperæmia, and very nearly restored the skin to its natural state. Tannin was tried in five grain doses, but did not appear at all beneficial. Of local applications I may mention a strong solution of nitrte of silver, which he declared "killed the itching," lead lotion of considerable strength (one in ten) and hot water. The effect of the latter was very noteworthy. He remarked that the face was more cooled by applying hot water—as hot as he could bear it—to the part, than by cold. This statement is borne out by that made to me by a lady's attendant, who noticed that after the daily wet-sheet packing, the patient's skin was paler than it was at any other part of the day. The packing was employed for the relief of a psoriasis which had rendered almost the whole of the cutaneous surface as red as a boiled lobster. Trousseau ("Clinique Med.," vol. ii., p. 645) has some observations to the same effect. He speaks of the great antiphlogistic power of caloric, and remarks, "L'action du chaud est en definitive sedative, tandis que celle dufroid est èminènmement phlogistique." In another case of sycosis, also of non-parasitic origin, where the skin of both lips had assumed a red, tuberculated aspect, arsenic alone, with citrine ointment, continued about two and a-half months, sufficed for a cure.

Case 3.—A. B., æt. 25, had recently, when I saw him, returned from a tropical country, where he had suffered from ague, and very specially from an eczematoid eruption of the face proving intractable to all treatment as long as he remained in that climate; considerable improvement had ensued since his arrival in a colder. His general health was good, and there was no other apparent cause for the malady than the injurious influences to which he had been exposed. When he sat still there was nothing very remarkable about his face—it was only rather too red; but when he walked about, or was in any way excited, took a little stimulus (even a glass of claret), or was exposed to heat, the colour became much deeper—in fact he flushed strongly. Sharp frosty weather was evidently beneficial, and of pharmacopœial remedies, tannin, with muriatic acid.

Case 4.—W. N., æt. 77, applied, Jan. 5th, 1867, at St. Mary's, on account of frost-bite which had occurred during the previous day of severe frost, while he was at work on the roads. To restore his benumbed hands when he came home he put them first into warm water, and afterwards held them to the fire. When seen, the thumb and index-finger of the left hand, the thumb and middle finger of the right, were much swollen at the tips, and the epidermis more or less raised by reddish serum effused beneath it. In all the fingers the vesication was well limited, but there was diffused redness some way up the fingers. The tips of all the other fingers were numb, and remained so for at least a fortnight after the occurrence of the frost-bite; they were not, however, visibly injured. Subsequently, the epidermis and the nails separated from the affected digits, leaving red, more or less granulating, surfaces. At the

tip of the left index there was a distinct black slough of the cutis, which was not detached until about three weeks had elapsed. The patient is a feeble old man, who has long suffered with stomach symptoms, too probably indicative of the presence of slowly-advancing cancer.

The above cases are, I hope, not without interest in themselves, as examples of particular affections; but I purpose making them serve as the text for some general remarks upon inflammation. Trite as the theme may be, it can never lose its interest for the thoughtful practitioner, who cannot but desire to gain some insight into the nature of a process, the manifold varieties of which so constantly present themselves to his observation. The parts concerned in inflammation are, or may be, the tissue of the locality, its vessels and nerves, and the blood. As to the first of these, we can hardly question that it exerts a control over the blood which traverses it; that the movement of the latter is in a measure determined by the nutritive actions of the tissue. If the latter are vigorous and active, the current of blood through the capillaries is rapid and free; if the reverse is the case, the blood-flow slackens and is sluggish. There can be, I presume, little doubt that the increase of temperature which is observed in a working muscle depends on the greater amount of blood which it receives. The waking and active brain, we know from direct observation, receives more blood than it does during the period of sleep. The same, we find from Bernard's researches, is the case with glands, although in this instance it may admit of doubt whether the hyperæmia or the increased action of the tissue takes the initiative. The arrest of blood in the pulmonary plexuses during apnœa seems to be distinctly traced to the cessation of the proper function of the lungs, to the interruption of the exchange between this fluid and the air in the vesicles which stands in the place of solid tissue. The moment that fresh air is readmitted to the lungs the blood reddens and begins to move on. The low erysipelatoid inflammation which so often appears in the limbs of the dropsical in their last days, where the blood seems utterly to stagnate in the cutaneous vessels, and remains in them even after death, can hardly be referred to anything else than a failure or derangement of the normal nutritive actions of the skin. Similarly, the congestive redness which appears on a part which is threatened with a bed-sore can surely be ascribed only to the injurious effect of the pressure on the vitality of the tissue. It is, indeed, quite the reverse of what we should have expected if we had regard only to the blood-vessels. The repeated careful examinations which I have made of the frog's web, when stasis was about to occur from the irritant effect of the vapour of ammonia, have most fully convinced me that the arrest of the red corpuscles depends not on any adhesion of them to the walls of the vessels, though this does subsequently occur; but on an interruption of some unseen conditions which previously rendered their transit through the capillaries perfectly facile. The stream is suddenly checked; the corpuscles, still floating free, oscillate to and fro, and seem to be withheld from passing on their way by some invisible force which soon overcomes the *vis a tergo*. The question occurs—whether a sudden contraction of the minute arteries produced by the irritant could give rise to this phenomenon? It is conceivable that this might be the case; but I must reject this explanation, because such a contraction would certainly not cease immediately, and the arteries, as stasis becomes established, are for the most part dilated and pouring in full currents of blood; because the commencing stasis may at first affect only a few capillaries, and the circulation be going on briskly in those adjoining; and because, after a very short time, the red corpuscles do most evidently adhere to the walls of the vessels, so that it is well-nigh certain that, even at this time, some alteration is taking place in the forces operating on these floating cells. Another phenomenon which seems very indicative of a disturbed action in the tissues, is the regurgitation of blood from the veins towards the capillaries which are the seat of stasis. This I had observed for myself before I read in Rokitansky's second edition of vol i. that it had been discovered by Weber. Lastly, I may refer to the evident tendency of the inflamed tissues to lapse into decay as another evidence of their essential concernment in the inflammatory process. Mr. Liston, in his able paper, of which a summary is contained in the "Proceedings of the Royal Society," No. 27, p. 584, comes to the same conclusion as I do. He points out how, when the irritation has been insufficient to cause actual stagnation, successive fresh portions of blood passing through the irritated area experience precisely the same change, consisting in slow movement of numerous and adhesive corpuscles.

The state of tissue excitement above described is always most marked in the early period of inflammation; it has—if not kept up by some cause, external or internal—a tendency to decline more or less rapidly, as is well evidenced by certain cases of pneumonia which terminate favourably in no long time when left to themselves, as well as in various external inflammations, such as those produced by blisters. This tendency to decline seems to be materially promoted by moist warmth, local depletion, and certain internal remedies. While it exists, tonic and astringent remedies—which, by constringing the arteries and so lessening the hyperæmia, would otherwise be most beneficial—are very apt to be injurious, acting, in fact, as irritants to the over-excitable tissue.

The derangement of the tissues conditionating inflammation cannot, I think, be uniform and identical in kind in all cases. In some, the saturation of the part with exudation is the most striking feature; in others, its rapid decay by ulceration or sloughing; in others, again, the rapid exfoliation of more or less abnormal cell-growth. In the second of these conditions, the power of forming living corpuscles is altogether arrested; in the latter it is excessive and perverted. Sometimes the effused fluid remains a long while among the tissues unchanged; more often it coagulates or corpusculates rapidly. These differences appear to me, from consideration of Mr. Lister's admirable researches on the coagulation of the blood ("Proc. of Roy. Soc.," No. 56), to be probably dependent on different states of the tissues; the more the latter approximate to dead matter, the more speedy is the coagulation.

As to the *blood* itself, besides what I have already stated, it may be remarked that observation of what occurs when resolution of stasis is taking place goes to confirm the view that some abnormal attraction of the corpuscles for the tissue, and for each other constitutes its essence. One evidently sees that some attraction, which holds together the stagnant corpuscles, and binds them to the capillary wall, gradually yields. The vis a tergo begins to prevail, the obstructing mass, whose liquor sanguinis has drained away, gets loosened in its channel, moves to and fro, at first with feeble, afterwards with larger excursions, then breaks up gradually into its constituent corpuscles, and so passes away into the veins. At and about this time individual corpuscles are still seen adhering to each other, and to the walls of the vessel; but nothing can be seen of any physical medium by which they are so attached. Although I do not question that the red corpuscles and white in passing though the capillaries of an irritated area, become adhesive, or, in plain terms, sticky; yet I cannot consider this stickiness as the main cause of their adhesion together and to the wall of the vessels. Usually, no doubt, the corpuscles are applied with their surface against the wall; but I remember observing on one occasion a red corpuscle attached by one extremity to the wall of a vessel in which circulation was returning, while several of its fellows, one after another, swept slowly past, brushing against it as it waved in the current. No mere glutinous matter could have attached a corpuscle in this way. Again, I am perfectly certain that the slackening of the blood current which precedes stasis does not depend on any adhesion of the corpuscles. It is evidently not any physical barrier that prevents their passing on in the normal way. The retardation of blood noticed by Mr. Paget in the inflamed wing of the bat cannot, I think, be explained by adhesion of the corpuscles, but plainly indicates an abnormal attraction of them to the tissue. Adhesion would cause stoppage, not slow movement. Knowing as we do that the red cor-

puscles in blood removed from the body cohere together, and more rapidly in inflammatory than they do in healthy blood, it seems a legitimate conclusion that their natural tendency to aggregate is in some way prevented in the healthy living system, and that its occurrence during inflammation is the result of this vital (*i.e.*, peculiar to living organisms) force being deranged or suspended. The increase of fibrine which occurs in inflamed blood, is to my thinking much more to be regarded as a deterioration of the blood-crasis than the reverse. Moreover, we have also to remember the well-established fact, that this fibrine may be, and often is, of a very abnormal kind, its corpuscular greatly preponderating over its fibrous element, so that indeed it is not far removed from pus. The deep red colour of urine passed during the existence of inflammation of any extent contrasted with the very pale colour of that which is secreted when the process has come to an end makes it, I think, very probable that during the increase and acme of the malady the red cells perish more rapidly than usual. As these are the chief living constituents of the blood, we have here another indication of its vitality being impaired, as we have already concluded that of the solid tissues to be while they are affected with inflammation.

The *vessels* concerned in inflammation are the smaller arteries, capillaries, and veins. Relaxation of their contractile circular coat seems to be the only alteration which the arteries and veins undergo, or at least the most important. I have certainly seen the arteries in the affected part more or less contracted, but this has been chiefly, I think, after stasis has been fully established. In the commencement of the process, and in the area surrounding it, the general result of observation is that the arteries are dilated. This paralytic relaxation, however produced, is a main cause of the hyperæmia which prevails so markedly in and around the focus of inflammation. By it, of course, the intra-vascular pressure in the affected district must be materially increased. It must be reckoned as another evidence of the enfeeblement of the component elements of the inflamed part in regard to their normal endowments.

With respect to the capillaries, it must first be remarked that their structureless wall is naturally endued with a retentive power of the contained blood, which varies, however, remarkably even the state of health in different localities, and varies still more in manifold morbid states. Thus the capillaries of the muscles, no doubt, allow a certain moderate amount of liquor sanguinis to transude through their wall; those of the kidney are peculiar in allowing a very large amount of watery liquid to escape; those of the air-cells of the lungs permit little more than gaseous fluids to transverse them; those of the adipose tissue give exit chiefly to oil, and so on. This peculiar filtering power, as we may term it, is very prone to be deranged by various causes. Increased intra-vascular pressure is one of the efficient and most commonly met with. Malaria, states of nervous depression, obscure influences, such as the influenzal miasm, certain cachexiæ, are also not uncommon. The effused fluid may vary from mere serosity with a minimum of organic matter to perfect liquor sanguinis, or the same mingled with corpuscles in varying amount.

Now, I think we may state, as a rule, to which, however, there may be many exceptions, that the above-mentioned alterations in the arteries and capillaries coincide, that when the muscular coat of the former is relaxed the homogenous membrane of the latter becomes less retentive than normal. There is, I think, also a tendency in the tissue of a part to fail in its vitality at the same time that its vessels fail, but unless it has been previously inflamed, unless the "branle" has been given to the steadiness of its nutrition, this derangement of the tissue is not apt to occur. The converse is much more frequent—that the vessels follow, are involved in, the quasi paralysis of the tissue. There are many familiar instances in which we may observe the prime importance of the vital condition of the tissue. If that be sound and vigorous, a large quantity of blood may traverse the part with no ill result. Its functional activity will be increased as long as the hyperæmia continues, and its nutritive power is unexhausted. If the latter, however, fails the hyperæmia will soon become a source of injury. Herein probably is contained the reason why inflammation is so much more common on thin membranes, mucous or serous, than in solid masses, such as the liver, brain, or muscle. The latter have a higher degree of vitality, and do not so readily yield to the influence of disturbing causes.

I have as yet said nothing relative to the concernment of the nerves in the inflammatory process. In truth, I believe there is not much to be said, for the chief part which the nerves play consists in their regulating the contraction and dilatation of arteries. Their paralysis, of course, conditionates arterial dilatation, and very probably also increased permeability of the capillary wall. A common nasal catarrh affords sometimes a good opportunity of observing how the amount of exudation is dependent on the condition of the general nerve force, operating, of course, upon the blood-vessels. I have again and again found that fatigue and fasting increase the profluvium, while rest, food, and moderate stimulation check or arrest it. In fact the process is the same in this case as when the cutaneous glands are excited to secretion by active exertion. Whether the direct or reflex irritation of any nerve is capable of exciting inflammation in the part to which it is distributed, appears to me at present very uncertain. There can be no question that paralysis of vasomotor nerves will conditionate inflammation in predisposed systems. Dupuy mentions an eruption over the whole cutaneous surface as being produced in horses from whom both superior cervical ganglia had been removed. A case occurred in this hospital about two years ago, in which, during a patient's third attack of hemiplegia, about fourteen days after its invasion a well-marked pemphigoid eruption appeared on the hand and foot of the paralysed limbs, about six ounces of clear blister-like serum came from the foot alone. There was at this time a good deal of delirium. Both it and the eruption ceased at the end of the third week, but the paralysis continued. The shock to the nervous system produced by surgical operations or burns sometimes gives rise to a red rash closely resembling that of scarlatina. Dr. Anstie, in his Lettsomian Lectures, has given some excellent examples of well-marked erysipelas being induced during the paroxysms of neuralgia in a district of skin supplied by the tortured nerve. Now, pain, let me remind you, is, in my view, a mode of paralysis of sensory nerves, as I have tried to show in my Lumleian lectures, and it is therefore not surprising to me to find a sensory associated with a vasomotor paralysis. Considering the close resemblance of herpes facialis and herpes zoster, as far as the appearance of the groups of vesicles, the great differences in the amount of attendant neuralgia in different instances of the latter, and the fact that both disorders come to an end spontaneously, I am much inclined to believe that both are produced in the same way—viz., by paralysis of certain vasomotor nerves; but that, in the zona, this condition of the vasal is associated with a more or less severe neuralgia of the sensory. The pain and the eruption correspond pretty accurately in their localization, just as they do in cases of facial neuralgia attended with erysipelas or erythema.

To return now to our cases. In the first it seems to me that the fault lay more in the vessels and nerves than in the tissue. It is true that the latter became very opaque from interstitial exudation again and again, but it showed a notable power of recovering its normal condition as soon as the hyperæmia was effectually controlled. To do this required the long sustained influence of a powerful astringent, which operated no doubt on the minute arteries and capillaries, restoring them to that normal state of contractile and retentive power, in which they were so evidently deficient. It is remarkable how extremely sensitive feeble nerves and vessels often are to minute atmospheric changes. A bunion will ache and be painful for many hours whenever a change of weather is approaching, although there is yet no appearance of change. In the second and third cases we have a very similar state of vessels to that which prevailed in the first, but there is this difference between the two latter, that in the patient with sycosis the tissue of the skin was more deeply in-

volved than in the patient with eczema. This was evidenced not only by the process in the former having for its chief seat the deep-seated hair follicles, but by the effect of heat, which mitigated the disorder in him as much as it aggravated it in the other. Tannin was rather injurious to the sycosis, but has benefited the eczema. The diffuse flushing which occurred in this man's face on exposure to the heat of a fire, on exertion, or on taking a very mild stimulant showed how weak and low was the contractility of the arterioles of his face which gave way on the least increase of intra-vascular pressure, or application of relaxing influence. Suppose the vessels of the bronchi, of the large intestine, or those of the pulmonary plexuses in a like condition, we can readily perceive how grave and difficult of management such disorder would be. This is probably one considerable reason why attacks of bronchitis in the aged, especially during this inclement season, are so intractable and fatal. The nerves and vessels of the membrane having lost much of their natural endowment are readily paralyzed by any depressing influence brought to bear upon them, as that of cold acting inhibitorily through the cutaneous nerves. The action of arsenic which availed so much in the cure of one and sufficed for that of a second case (v. B. M. J. 1862, December 6th) of sycosis may, I believe, be formulated as follows :—it is a specific stimulus to the vessels, and nerves and tissue of various parts, imprimis to those of the skin. For its successful operation it is essential that the tissue of the part should not be irritable, not too near that which exists in acute inflammation, for if it be so, the stimulus acts injuriously, and increases existing disorder. If, on the other hand, a passive state of the tissue can be ensured, the drug may act most beneficially on the tissues and vessels, restoring the latter to a due degree of contraction, and so abolishing hyperæmia and its results. The great utility of arsenic in neuralgia, chorea, and intermittent fever justifies the assumption that it acts primarily on and through the vasomotor nerves in effecting a cure of inflammatory conditions. The conbination of a saline aperient with iron and a nervine, which completed the cure of the case of sycosis, is a very valuable one in many instances of chronic inflammation, where the tissue is intolerant of an unmodified stimulus. It depletes the engorged vessels and tones them at the same time.

In the case of frost-bite, it seems to me evident that the prime cause of the inflammation was the depression of the vitality of the skin by the cold. It is possible that by very gradual and cautious stimulation, the half-dead parts might have been restored without suffering injury, but his practice of applying heat lavishly, by relaxing the blood-vessels, gave rise to far more blood-flow than their weak vitality could endure. What a traumatic lesion does in one instance, the gouty poison in another, arsenic in a third, heat locally applied in a fourth, &c., the cold effected here; that is, it reduced the condition of the affected part nearer to that of dead matter, in consequence of which, when the blood began again to circulate through the part, the normal relations between it and the tissue were quite deranged. The means which you should employ to restore the damaged vitality of an inflamed tissue vary very much according to the particular circumstances, thus bearing out fully what I have already stated, that the deranged condition of the tissue in inflammation is by no means uniform and constant. I must reserve what I have to say on this head to another occasion, and will now only ask you to carry away with you these notions:—(1.) That the causative condition of an inflammation may consist in impairment of the vital properties, either of the nerves and vessels on the one hand, or of the tissue on the other. (2.) That in most instances both factors are simultaneously at fault, though probably not in equal degrees. (3). That the tissue is apt to be most criminal in the earlier period of inflammation, the nerves and vessels in a later, and in more prolonged cases. (4.) That in cases where the disorder is chiefly neural and vascular, very marked success may be achieved by the persevering employment of tonic and astringent remedies.

CLINICAL LECTURES

DELIVERED IN

STEEVENS' HOSPITAL,

TOGETHER WITH

OBSERVATIONS ON PRACTICAL MEDICINE.

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REMARKS ON CHLOROSIS AND HÆMORRHAGE.

(Continued from page 138.)

Chlorotic patients are liable to various incidental affections of the lungs. Acute bronchitis and acute pneumonia are not of very common occurrence ; nor is bronchial hæmorrhage, or pulmonary apoplexy. These are more likely to occur in cases of anæmia produced by antecedent hæmorrhage or wasting disease, than in true chlorosis. I have, however, occasionally seen chlorosis complicated with circumscribed chronic pneumonia, and frequently with chronic bronchitis, terminating ultimately and remotely in tubercular phthisis. In this affection, therefore, a prolonged and intractable bronchitis is a formidable symptom. Nevertheless. when I compare the number of chlorotic cases ending in phthisis, with the number of hæmorrhagic cases ending in the same disease—judging from my own sphere of observation—I find the latter greatly to exceed the former. I may further add, that, in the prophylactic treatment of phthisis, considerable modification is requisite ; inasmuch as that which is best calculated to prevent the chlorotic, is not, in all its details, equally suitable to what may be termed the hæmoptysical phthisis. I have seen a few cases of chlorosis complicated, some with periodic, others with irregular spasmodic asthma.

Chlorotic patients are also subject to a very great variety of incidental disturbances and perversions of the digestive function, which, in some cases, throw serious obstacles in the way of treatment, and render it more tedious and difficult. Of these, one of the most frequent is the distension of the stomach, which arises after meals, no matter how simple and easy of digestion the food may be. In many instances we meet with most distressing gastric and intestinal flatulence ; not such as results from mere indigestion, but a copious and continual secretion of gas, similar to that which we so frequently find to arise in hysteric patients. This symptom is sometimes accompanied with a constant noise and motion of the intestines ; a rumbling so loud as to be audible to those around, and exceedingly distressing to the patient. The gas, pent up by irregular contractions of the intestines, is the cause of severe and sharp pains, not only in the abdomen, but in remote situations. It is often the sole cause of intense pains in various parts of the chest, shoulders, sides, and also along the limbs ; pains which are at once removed by any medicine which has the effect of expelling or even displacing the confined air. In such cases a portion of the intestine may be observed to swell, and thus form a large, circumscribed, tympanitic tumour. These symptoms are greatly relieved by warm, cordial cathartics ; by stimulating frictions and rubefacient applications, such as mustard or turpentine, over the abdomen ; and by small, frequently-repeated doses of the rectified spirit of turpentine internally. A drop or two of creasote, in a pill to be taken thrice daily, is often exceedingly useful when given in conjunction with the compound galbanum pill. Galbanum itself, in full doses, is in some cases a most effective remedy. I have also seen marked advantage to arise from newly-burned and finely pulverised carbon ; the charcoal derived from box-wood is, I think, the best ; and the less the powdered charcoal is exposed to the air the more efficient it is. The following powder has proved itself, in many instances, a remedy of value : Of freshly-burned charcoal reduced to fine powder, a scruple ; calcined magnesia,

ten grains ; powdered nutmeg, five grains. Mix. To be blended with a little milk first ; then a sufficiency of water or milk added to suspend the powder, so that it may be easily taken. It may be repeated two or three times daily. Should the bowels be disposed to relaxation, powdered crabs' claws or precipitated chalk may be substituted for the magnesia. I have known chlorotic patients who had been greatly harrassed by these incessant gaseous secretions—after every variety of treatment and the most careful regulation of diet had failed to procure more than temporary alleviation—ultimately and completely cured by travelling and repeatedly changing the air. Amongst the occasional symptoms which complicate chlorosis, we meet with instances of an extraordinary perversion of appetite. Those so affected are very unmanageable patients. As this symptom, however, belongs more properly to hysteria than to chlorosis, we shall not dwell further on it here.

It has been already remarked that chlorosis is usually characterized by obstinate constipation, and that it predisposes to collections in the colon and rectum of indurated fæces, enormous masses of which are sometimes thus accumulated. As the bowels will sometimes act whilst these still remain lodged in the cells of the colon, the accumulation may easily be overlooked ; we must, therefore, be careful that this evil, which interferes with and prevents all successful treatment, may not elude our vigilance. I saw lately a well-marked case of chlorosis in which a large, hard mass of fæcal matter occupied and distended the pouch of the rectum ; it was so firmly lodged as to require mechanical means to effect its removal.

Amongst the less frequent, but by no means uncommon complications of chlorosis, serous effusions demand especial notice. The tendency of this affection, as contra-distinguished from hæmorrhage, is to give rise to exudations of serum, whilst exudations of blood are comparatively rare. These effusions, which are common both to chlorosis and anæmia, may be poured out either into the serous cavities, or into the cells of the subcutaneous cellular tissue. Whenever the blood, from any cause, is reduced to an extreme degree of attenuation, we have much reason to apprehend such a catastrophe.

The following case illustrates chlorotic anasarca :—

A married lady, aged 19, had been for several months labouring under gradually-increasing chlorosis. Previously to her marriage she had looked pale and delicate, and had lost much of her accustomed health, strength, and spirits. Marriage, it had been expected, would have had a salutary effect ; and for a short time, whilst travelling, her health appeared to improve. She again, however, became languid, depressed, and pallid, and at length universally anasarcous. In this state I first saw her. She was confined to bed ; her debility so great that it was with difficulty she could be moved ; and her whole person was enormously distended. Her face was œdematous, but less so than every other part of her body ; a copious serous effusion had taken place universally into the cells of the subcutaneous cellular tissue. Her pulse was incalculably rapid, and so feeble that it was with difficulty it could be felt at the wrist. The heart's impulses were languid in the extreme, but unaccompanied by any abnormal sound. The respiration was permanently and greatly accelerated. The alvine excretions were liquid and of light yellow colour ; she was so weak and helpless that she could not be placed on the bed-pan. The urine was light-coloured, not copious, of low specific gravity, but without a trace of albumen. A variety of treatment, both tonic and diuretic, had been in vain employed, and all hope of recovery abandoned ; and yet there was no evidence of organic disease ; the sole change which had taken place was in the blood itself. From the appearance of the skin, and from the slightness of the pressure necessary to displace the fluid, it was evident that the effusion was of the thinnest nature. Under these circumstances I thought this an unusually favourable case for acupuncturation. The operation was immediately performed ; a great number of punctures were made, from which thin serum flowed copiously, and much care was taken to keep the patient dry and warm. Common salt was dissolved in water, to which the muriated tincture of iron was added ; and of this as much was given, at regular intervals, as the stomach could easily endure, together with farinacous nutriment and wine. On the next day the patient's condition was in every respect an improved one ; the anasarca was diminished, the pulse more distinct and less frequent, the respiration less hurried, and the urine much increased in quantity. On the second day many additional punctures were made, and on the third day they were again repeated. After this day the greatly increased flow of urine, and the marked diminution of every urgent symptom, rendered it unnecessary to reiterate the operation. She gradually—I may truly say rapidly—recovered ; her restoration was perfect ; she became vigorous and even florid ; she has borne several children ; and many years have since elapsed, leaving her in the enjoyment of uninterrupted health.

The next case I shall record is one of great interest,—a case of extreme anasarca, the result of anæmia, and without organic lesion, occurring in an hospital-patient. He was about thirty years of age, had never lived intemperately, and was superior to the generality of hospital-patients in manner and education. His life had been spent in an office, at the desk, the nature of his occupations permitting him to take very little exercise. By long continued and frequently profuse bleeding from the hæmorrhoidal vessels, he was reduced to a state of complete anæmia, and, owing to extreme debility, had been compelled to give up his situation as a clerk. When admitted into hospital he was universally anasarcous. The first signs of œdema manifested themselves in the lower extremities and face ; his respiration was hurried ; his pulse feeble and rapid ; no murmur accompanied the cardiac movements, nor was there any auricular evidence of deposition in the pulmonary cells. The urine was scanty, low in density, and not albuminous. He remained for several days in hospital, and the symptoms not being in the least degree submissive to treatment, it was determined to give exit to the fluid by acupuncturation. Numerous punctures were made, during several successive days, in different parts of the body ; the thin serum flowed freely ; the anasarca subsided ; the secretions became abundant ; and the treatment ultimately issued in a complete restoration to health. His diet was gradually rendered more and more nutritious ; he was allowed wine and malt liquor ; and after the operations, his medicines were iron and ammonia. I cannot avoid recording an emphatic expression used by this man. After having been twice acupuncturated, and when the serum was flowing profusely, I asked him how he felt ? His reply was : "Sir, I feel greatly relieved : when I was a boy, I wept from my eyes ; now that I am a man, I weep from my whole body."

These cases illustrate the circumstances under which the operation of acupuncturation may be most advantageously employed ; indeed the only circumstances which give to it a permanent value. It may often be practised usefully as a palliative : rarely, however, is it a curative measure. In dropsy from organic disease it removes the tension, and enables the blood to circulate more freely, so that the medicines may act, and the effused fluid be absorbed ; but the organic disease remains, and the dropsy returns. In the foregoing cases there was no organic lesion, either cardiac, pulmonary, hepatic, splenic, or renal. The tension being removed, and the medicines enabled to produce their full effect, the serous effusion was absorbed, the constitution invigorated, the quality of the blood improved, and the cure rendered perfect. Far otherwise is it in those vastly more numerous cases of dropsy resulting from morbid change and deposition in organs essential to life ; in many of these, acupuncture is an useful adjuvant in the treatment, but it cannot remove the cause of the effusion.

Trifling as this operation is, I have seen it followed by consequences the most disastrous—erysipelas and gangrene. In advanced cases of dropsy, when the blood is much altered—all but disorganized—it is dangerous to puncture the skin. I have also seen cases in which, from the perpetual oozing of cold serum, the broken-down state of the health and of the blood, each puncture has been followed

by a large and foul ulcer. In other instances of hopeless dropsy, even though the patient escape these grave consequences of acupuncturation, the limbs have been kept so constantly wet and cold as greatly to distress the patient and aggravate his sufferings. It requires, then, observation and judgment to distinguish the cases in which this remedy may be safely and successfully employed. It may be here remarked that the more limpid and less dense the effusion, the more favourable is the case for acupuncturation. I have observed many cases of anasarca resulting from organic renal disease, wherein it required strong pressure to produce a pit or dimple; nay, more, the limbs have been so rigid as to render the joints immoveable, such has been the density and solidity of the matter which occupied the subcutaneous cellular tissue. I have preserved the records of several interesting facts to illustrate the various degrees of density of the fluid effused in the different forms of anasarcous swelling; which on some future suitable occasion I hope to bring before the profession.

I saw, some years ago, in consultation with Sir Philip Crampton, a very remarkable case of anæmic dropsy; the patient was about thirty-five years of age; he had been reduced by long-continued and profuse hæmorrhoidal bleeding to a state of extreme anæmia. The prominent symptoms were death-like pallor, excessive debility, languor, constant dyspnœa, occasional orthopnœa, bellows-murmur of the heart and arteries, universal anasarca, and peritonæal effusion. Sir P. Crampton, by an operation, put an end to the sanguineous exudation, whereupon a rally took place; and then tonics, diuretics, moderate stimuli, and nutritious diet, completed the cure.

Formerly, cases of chlorosis characterized by unusual disturbance of the cardiac action were treated as genuine organic diseases of the heart. Repeatedly, in the early part of my professional life, I have witnessed the pernicious effects of this mistake. I have seen patients who needed iron, solid nutritious food, and the open air, treated by weeks or months of recumbency, digitalis, repeated bleedings, and abstemious diet. Fatal in its results must such treatment be. At the present day mistakes of this nature are of exceedingly rare occurrence; cases, however, do occur, the diagnosis of which is involved in some obscurity. Œdema of the lower extremities, co-existing with orthopnœa, startings in a fright from sleep, violent palpitations and systolic murmurs, are symptoms calculated to render the diagnosis obscure and difficult.

The following case of chlorotic anasarca, which fell under my notice many years ago, made a deep and lasting impression on my mind. It was that of a young lady, who, without any palpable or discoverable cause, had gradually fallen into a state of extreme chlorosis, her debility being such that she was confined to bed. She was unable to remain long in the recumbent position; she lay with her chest and shoulders elevated—the only position in which, with comparative ease, she could breathe; she was seized frequently with paroxysms of dyspnœa and palpitation; the lower extremities were much swollen, and the œdema extended to the hips. When I saw her, she was pallid and prostrated in the extreme; her pulse feeble, rapid, and unequal; a bellows-sound accompanied each systole of the heart, and a similar murmur was heard along the line of the large arterial tubes. I could not discover any venous hum or sound. In the lower extremities a very slight degree of pressure produced a deep pitting. The occasion of my visit was to determine whether, being provided with a bed in a travelling carriage, she might be removed from this city to the residence of her parents in the south of England. Her case was looked upon and had been treated as one of hopeless organic disease of the heart. A carriage, with a well-constructed bed, was provided; she was taken out a few times for a short drive, which she bore well. Her journey homewards was then determined upon. Each day's travelling was followed by a manifest abatement of the most urgent symptoms: the good derived from travelling was so obvious that it was persevered in. She continued to travel for a long time, and returned quite a renovated person. I saw her years afterwards full of health and spirits.

I was not then as well aware as I now am, of the extent to which an extremely attenuated state of the blood is capable of disturbing the cardiac and pulmonary functions, so as even to simulate heart disease. Nor was I fully acquainted with that form of dropsy or anasarca, which may appropriately be termed anæmic anasarca; a variety of dropsy usually looked upon as resulting merely from debility, but in reality dependent upon the remarkable attenuation in the quality of the blood which takes place in the advanced stage of chlorosis and anæmia. It is distinct, and easily distinguishable from the anasarca which accompanies Bright's disease of the kidney; it holds a separate place, and may be placed under the head of chlorotic and anæmic dropsy. A dropsical effusion frequently takes place in the last stage of purpura hæmorrhagica; this too depends upon an alteration in the constituent elements of the blood,—an alteration, however, in some respects, of a nature different from that which characterizes chlorosis.

(To be continued.)

Hospital Reports.

THE LONDON HOSPITAL.

CLINICAL REMARKS ON A CASE OF ELEPHANTIASIS.

Under the care of Mr. HUTCHINSON.

THERE are two diseases to which the term elephantiasis has been applied, quite distinct from one another; elephantiasis græcorum, true leprosy, which is very rare in England, and of constitutional origin; and an elephantiasis attended with local hypertrophy, but not usually with constitutional disease.

Mr. Hutchinson considered this latter affection to be due to impediment to the circulation, causing œdema, which would still further interfere with the circulation by its own weight. The tissues being flooded with nutrient material (blood) begin to grow enormously; first of all the structures of the skin, papillæ, &c., then the deeper structures, even the bone. He showed two interesting specimens, from the museum, of the bones of the leg crusted all over with new growths, which he had no doubt were from a case of elephantiasis. In one, about the middle of the tibia, there was a circumscribed oval patch, with a well marked margin of new bone all round it, most probably the seat of an old ulcer.

He pointed out that elephantiasis was common in those parts liable to œdema, as the scrotum, penis, &c., and legs.

He believed that whenever the papillæ had once become very much enlarged, it was impossible to really cure the disease, though much might be done, if the leg, for instance, were affected, by rest and careful bandaging.

The case which led to these remarks was that of a young woman, with great hypertrophy of the clitoris and labia minora. She was also the subject of constitutional syphilis, and he should think that though the elephantiasis was not itself a specific disease, yet the œdema produced by the gonorrhœal inflammation, &c., had led ultimately to the present state of things. He hoped by rest to reduce the swelling a little, and when the syphilitic affection was cured, he intended to remove the growth, as he did not think it would ever get well without it. He alluded to several cases of elephantiasis of the leg recently under care at the London and Skin Hospitals. He had never himself dissected a limb affected with elephantiasis, but the results of such have been recorded by Continental writers (Wedl).

He insisted that the distinction between solid and permanent œdema of a dependent part and elephantiasis was merely one of degree, and that the two conditions were usually met with together. The greater the degree in

which the papillæ were involved, the more applicable did the term elephantiasis become. He alluded also to the influence of local inflammations in starting the processes which result in elephantoid hypertrophy. Thus chronic ulcers on the leg, venereal ulcers, and discharges from the genitals are the most common causes of the disease as it is met with in English practice.

SPONTANEOUS LATERAL DISLOCATION OF THE PATELLA.

About a month ago, a healthy girl, 8 years of age, was brought to Mr. Hutchinson, at the hospital, who could displace her right patella at will. It was unusually loose, and whenever she bent her knee it slipped outwards. The left was quite normal. It was said that she had only been able to do this for the last six months.

In some of these cases there is very decided inward bend of the knee, by which the displacement of the patella is to be explained. In the present case, however, there is little or no tendency to knock-knees, and it is to be further noted that the first displacement occurred spontaneously, and not in connection with any violence.

INTRA-UTERINE UNION OF HARE-LIP.

Mr. Hutchinson had also lately an interesting case of hare-lip, in which partial union had taken place before birth. The infant was about six weeks old, and the fissure had been on the left side only. At the upper part there was an evident scar left by cicatrisation, but the lower part was still open. The palate was not involved.

Mr. Hutchinson completed the half-finished cure in the usual way.

In clinical remarks on this case, Mr. Hutchinson stated that the union by cicatrix did every now and then occur during intra-uterine life. He had seen three or four cases in which infants were born with a scar extending through the whole length of the upper lip, exactly in the position left by that of a successful operation. In fact, nothing but the most conclusive testimony of the little patient's friends, and the absence of the scars of the needles, had in these instances removed his incredulity as to the condition being congenital.

NOTE AS TO IMPROVEMENT OF SPEECH FOUR YEARS AFTER OPERATION FOR CLEFT PALATE.

An opportunity occurred for noting the ultimate result, as regards the voice, of a successful operation for cleft palate. The patient was a young woman, on whom Mr. Hutchinson had operated four years ago for a cleft of the whole of the soft and the posterior part of the hard palate. The result had been most satisfactory. All the parts had well united, except a small notch in the end of the uvula, and she considered herself as remarkably improved in distinctness of utterance. She could really talk very well indeed. Many would not have noticed any imperfection. Before the operation her speech was very bad.

SYMMETRICAL CELLULAR NODES ON THE KNEES.

There is now in Sophia Ward a healthy-looking, fresh-complexioned woman, æt. 44, with a tertiary syphilitic ulcer, the size and shape of a shilling, in front of each knee. Gummous tumours in this situation are common enough on one side, but we rarely see this condition symmetrical. Mr. Hutchinson frequently draws attention to the fact that tertiary syphilitic manifestations rarely show themselves at the same time in corresponding parts of the body or limbs, whilst, on the contrary, the secondary phenomena are almost invariably symmetrical.

In the case mentioned above, the ulcers are rapidly healing under the influence of ten-grain doses of iodide of potassium.

ST. GEORGE'S HOSPITAL.

STONE IN THE BLADDER: LITHOTOMY.

Under the care of Mr. POLLOCK.

On Thursday last we witnessed the operation of lithotomy performed by Mr. Pollock, on a young man who had been in St. George's Hospital about a month. There was nothing remarkable in the case, and chloroform having been given the operation was performed with considerable skill, two large calculi being extracted. A very brief delay was caused by one calculus being lodged in a kind of pouch behind the prostate. Each calculus had a sort of shell as a coating which broke into many fragments on being seized by the forceps.

In the course of some remarks addressed to the pupils who had witnessed the operation, Mr. Pollock stated that the young man came into the hospital without the usual symptoms of stone. But as his urine was alkaline attention was directed to the subject, and the calculus detected. He exhibited the two large calculi he had just extracted, and which he considered were probably at first composed of lithic acid; afterwards these would set up irritation, and the phosphatic deposits would take place on the lithic nucleus. A number of large fragments of the shell were subsequently removed.

DISEASE OF THE FEMUR.

Under the care of Mr. H. LEE.

On the same day Mr. Lee operated on a young woman for a very chronic disease of the thigh bone. Chloroform having been given, Mr. Lee cut down upon the trochanter, and proceeded to extract the diseased bone by means of the gouge and the trephine. He informed the class that the disease was of several years' duration. After being in the hospital a little to recruit her strength, he thought it well to operate. At first he was not prepared to find so extensive a mass of the cancellous structure so completely diseased. Mr. Lee exhibited the portions he had removed, showing how, on squeezing, purulent matter was exuded, as if it were a sponge saturated with pus. It was clear that the patient, already greatly reduced, could not recover without aid, but now that, as he thought, the whole of the diseased tissue was removed, some hope might be entertained of a favourable issue.

Proceedings of Societies.

SURGICAL SOCIETY OF IRELAND.

FRIDAY, FEBRUARY 1, 1867.

Dr. BUTCHER, President of the College, in the Chair.

SPECIMENS OF PATHOLOGICAL AND ANOMALOUS ANATOMY.

By ALEXANDER MACALISTER.

THE specimens which I have for exhibition this evening are of some interest, and were met with by me in the College of Surgeons' dissecting-room. The first is an instance of enlargement of the left lateral lobe of the thyroid gland, taken from the body of an elderly female of whom I had no history. The right lobe and isthmus were of normal size, but the left was enormously enlarged, extending downwards into the thorax, displacing the trachea to the right, and the great vessels to the left, flattening the sympathetic and recurrent laryngeal nerves, and pressing on the œsophagus. When cut into, it was found to consist—1st, of a lamina of unaltered substance; 2ndly, of a hard somewhat cartilaginous structure, too far decomposed for microscopical investigation, but presenting all the physical features of a cancerous texture. The same subject had a scirrhus enlargement of the left ovary, and a single point of Farre's tubercle just at the transverse fissure of the liver. Scirrhus in the thyroid body is a disease of rare occurrence, but has been described by Von Franke in the *Deutsche Klinik*, vol. 39, and also by Cæsar Hawkins and Holmes Coote. The other specimens are interesting, as being rare forms of muscle arrangement; the first being an example of a third tendinous band for the biceps, springing from the outer lip of the bicipital groove, in common with the tendon of the great pectoral, while the other is an example of a not uncommon arrangement of the palmaris longus from the same arm, showing a round condyloid tendon of origin, a central belly, over four inches in length, and a flat tendon of insertion. Another specimen is that of a very common, though seldom noticed,

arrangement of the coraco-brachialis muscle—namely, its insertion into a tendinous sling overlapping the tendon of the latissimus dorsi. Henle, in his valuable "*Muskel Lehre*," figures this as the normal arrangement, which, indeed, seems to me to be the case.

I might, in conclusion, mention an interesting case of arterial irregularity, in which the femoral artery was accompanied by two venæ comites, and gave off the external circumflex, internal circumflex, and profunda separately; then, becoming popliteal, divided into peroneal and posterior tibial, the former branch sending off the anterior tibial. This rare case is interesting, as showing the homotypes of the arteries to the upper and lower extremities.

The PRESIDENT observed that this tumour of the thyroid body was most interesting, as enlargements of it were constantly met with, and it became a difficult matter to diagnose as to whether the surgeon should meddle with them or not. The case which Dr. Macalister had brought before them fully illustrated this. The tumour was of unusual size, pressing aside the main vessels and producing a good deal of embarrassment, yet upon the decision of the surgeon must rest entirely the relief of the patient from such a tumour as that. In cases of goitre there were many reasons why they should not meddle with them; but tumours, such as that exhibited by Dr. Macalister, were constantly removed by the practical surgeon. The instances of unusual attachments of the muscles, which had been brought under their notice, are also most interesting, bringing them back to those types of life in which these attachments of muscles are seen.

ADVANTAGES OF BLANDIN'S KNIFE FOR DIVIDING THE PREPUCE IN INFLAMMATORY PHYMOSIS.

MR. PORTER said he would not occupy the time of the Society more than a few minutes in bringing before the members a knife for operating in cases of inflammatory phymosis, which he had found both convenient and efficient. The simple mode of slitting up the prepuce had attracted notice from an early date, and instruments had been made specially for the operation, yet he had found none to answer so well as the one he was now about to bring under their notice, both as regards the ease and rapidity with which it could be used. Mr. Porter then read the following:—

The simple, yet important operation of slitting up the prepuce in cases of inflammatory, or acquired phymosis, has attracted notice from a very early date, and in the present day the practical surgeon is not unfrequently called upon to perform it. To evidence the importance in which the proper execution of this operation has always been held, I may mention that special knives have been suggested, and used by Guillemeau, Petit, Latta, and Charles Bell. It is almost a matter of surprise that the performance of this procedure should ever have aroused the ingenuity of those men to produce instruments peculiarly for it. Yet the judicious and rapid execution of even the most trifling surgical operation is frequently of paramount importance to the patient, and at the same time facilitates the surgeon in relieving the sufferer. When, from the presence of ulcers, or incarcerated discharge beneath, the prepuce becomes acutely inflamed, and enormously tumified; its orifice contracts so tightly, that any attempt to glide it back over the glans is found to be impracticable, and renders it difficult and painful to insinuate even a director through it, on which to guide a bistoury for slitting it up. It should be the object of every one to simplify as much as possible operations, and with this view the surgeons I have quoted advocated their several instruments for cutting the prepuce in this inflamed condition. Bell's mode may be objected to on the ground that two instruments are required when one might be made to answer the purpose. In fact, his mode of operating differed little from the ordinary manner of treating it in the present day. He used a sharp-pointed bistoury, on which a deeply-grooved director was made to slide, thus converting it into a sort of sheathed knife, as soon as the bistoury was in its proper situation it was pushed through, the director being firmly held. This sheath must have rendered the knife broader, more difficult and painful to introduce when the orifice was very much contracted; besides, it required the use of both hands to manage the instrument. Petit's plan also required two separate applications, the director and knife. Some Surgeons use button-pointed scissors to slit up the prepuce in those cases, but against this plan may be urged that it is slower, and does not make so clean a cut as the knife. Again, it has been proposed to fix a little rounded piece of wax on the extremity of an ordinary sharp-pointed bistoury, and insert the instrument thus guarded. It is found, however, that the point often pierces the wax too soon, and renders it impossible to pass the knife thus denuded sufficiently far back to its proper position up to the corona glandis. It may be fairly inquired what can be more simple than the usual mode of operating by introducing a director, either by the side of the frœnum, as advocated by Cloquet, and guiding a sharp-pointed bistoury along this to divide the prepuce; or the still more common plan of passing the director above the glans back to the corona glandis, and upon it introducing a sharp-pointed bistoury, and then forcing its point through the integument, and quickly cutting forward with one stroke. I would reply, by stating what I have often seen with others, and experienced in my own practice, that the introduction of the director, particularly when the glans is ulcerated, gives a great deal of pain, even more than the rapid cut with the knife which follows. And in addition to this objection, the surgeon will find in cases where the orifice is much contracted, that the heel or broad part of the bistoury begins to cut the tightened orifice before the point reaches its proper destination; these are no mean objections in an operation so trifling as to be hardly worth while putting the patient under chloroform. And, furthermore, the two instruments require both hands of the operator to be employed with them, whereas one might, with more advantage, hold the penis in order to steady it. The knife I have latterly employed, and which I found so efficient, that I venture to recommend it to my professional brethern, is one invented by "Blandin" for section of the sphincter ani muscle. The blade is fitted to the sheath, so that it may be introduced completely masked. The sheath is movable, not the blades, which has the advantage of permitting the knife to be introduced to the proper position before unmasking its edge. When sheathed it is not larger than a common director, it is as easily introduced as a probe from its shape, and when passed to the corona glandis with the forefinger of the right hand placed on the bottom, the sheath can be drawn back into the handle, and the blade thus exposed may, in a moment, be pushed through the integuments, and the inflamed prepuce slit forward with the greatest rapidity. The knife can be managed altogether with one hand, whilst the other is left free to hold the penis in a proper position for the operation.

Dr. FLEMING wished to ask Mr. Porter whether his remarks had reference to acute inflammatory, or to congenital phymosis.

Mr. PORTER said it was to inflammatory phymosis he altogether referred.

Dr. FLEMING would ask whether in the majority of the cases of acute inflammatory phymosis, the mere section of the prepuce is sufficient to effect a cure. Whether there be ulcerations or matter confined from the contraction of the orifice, he thought if they reflected one moment they would see that it would require more than a mere section of the prepuce to answer the purpose. He approved of this simple section of the prepuce in those cases where there was contraction of the orifice and inflammation to a certain extent; but in many of the acute cases in hospital practice, the mere section of the prepuce would not answer, and it was often necessary to remove a considerable portion of the prepuce itself.

Mr. MACNAMARA:—The point before the Society is simply a knife to divide the prepuce, and not the general treatment of phymosis.

The PRESIDENT ruled that the subject of phymosis generally could not be entered upon. The matter before the Society is merely a simple mode of dividing the prepuce in inflammatory phymosis. The knife exhibited by Mr. Porter they all had in their instrument cases. It is generally used for opening sinuses in the neck, and in situations where there was a difficulty and danger in introducing an ordinary instrument. The knife is a beautiful one, exceedingly applicable to the cases in which Mr. Porter had used it, and particularly to all those cases where there was terror created by the use of large instruments.

Mr. PORTER said that the President had exactly explained the object which he had in bringing this instrument before the Society. He claimed nothing new for himself in the matter.

SALIVARY CALCULUS.

Dr. LEECH thought it might be interesting to exhibit to the Society a salivary calculus which he had recently extracted. Ranula was a common disease, but calculi were not common even of this size. In Wharton's duct they were rare, and in Steno's duct still rarer. The person from whom this specimen was taken was a farmer aged about forty, and of healthy ap-

pearance. He came to him (Dr. Leech) on the 12th of December last, stating that for three weeks previously he had had sore throat, and for the last few days had found it difficult to swallow any food. He also said that for some time he had had a swelling under his tongue, but that it gave him very little trouble till the last fortnight. On looking into the man's mouth he perceived a large tumour under the tongue pressing that organ upwards and backwards, and presenting all the appearance of a common ranula, but on examination it was found to be much more dense and inelastic than those tumours usually are, and on pressure there was a very slight oozing from the orifice of the Wharton duct at the right side of a white matter resembling pus. He (Dr. Leech) at once proceeded to lay open the tumour with a sharp bistoury, when the point of the instrument struck against a hard stony body, which immediately revealed the nature of the case, and after some little difficulty, a calculus about the size of an almond was removed, the top sharp portion being separated from the larger end. The patient got immediate relief, and next day reported himself well. This man had no tartar on his teeth. Dr. Mapother had made an analysis of the calculus, and found it was composed of 60 parts of carbonate of lime, 30 of phosphate of lime, and 8 of organic matter. The analysis made from time to time of these calculi differed very much as to the ingredients of which they were composed.

Mr. E. Hamilton asked whether there was found any trace of sulpho-cyanide of potassium.

Dr. Leech said Dr. Mapother informed him that there was no trace of it whatever.

Dr. Mapother observed that the quantity of the calculus which he examined was very small, not more than two grains and three-tenths, so that his analysis might not be as satisfactory as might be desired. He could find no trace of sulpho-cyanide of potassium. Claude Bernard had never found that salt in saliva except under diseased conditions, when the breath was very foul, and a great deal of tartar on the teeth. Bernard thought it was the result of decomposition, but at all events he had never found it in any healthy young person with clean teeth. Six years ago a patient sent him a calculus larger than that extracted by Dr. Leech, and there was not the slightest trace of carbonate of lime in it, whereas, in this instance, more than one half of the quantity he examined was carbonate of lime, the remaining ingredients being phosphate of lime, and organic matter. The organic matter seemed to be dried mucus, and had the burnt feather smell when heated.

Mr. E. Hamilton. As to the statement that sulpho-cyanide of potassium is not a constituent of ordinary saliva, he was prepared to contradict it from his personal experience. He had obtained it in perfectly healthy saliva.

The President observed that as there was some doubt as to the analysis, he thought it would be well if a larger portion of the calculus were examined, and the result reported to the Society. He suggested, therefore, if Dr. Leech would devote the calculus to this purpose, that Mr. Hamilton, Dr. Mapother, and Professor Macnamara be requested to undertake the analysis and report to the Society at its next meeting.

The gentlemen named undertook to make the analysis..

THE CIRCUMSTANCES WHICH CONDUCE TO THE SPREAD OF CHOLERA.

Professor Mapother read a paper on the circumstances which conduce to the spread of cholera. The disease was imported into Dublin from Liverpool on the 26th of July last, and spread to three other houses on City-quay. Several other cases were traceable to communication with this case, directly or indirectly, but, as in other maladies, the contagion cannot always be traced. An abstract of meteorological observations was also given, from which no positive result could be deduced. Dr. Mapother endeavoured to show that three conditions should concur for the origin and spread of cholera; 1st, the germ; 2nd, a porous undrained state of soil; and 3rd, a peculiar kind of receptivity. In discussing the former, he controverts the doctrines of the Commissioners of Health of 1849. He dwelt particularly on the influence exercised on the spread of cholera by a bad and deficient water supply, and cited two instances mentioned by Dr. Snow to show, in one case, the decrease of cholera following improved water supply, and in the other, its increase when the quality of that necessity was deteriorated. The cases of cholera in Exeter in 1832 exceeded 1000. The water supply was by carriers from the river, into which all the sewage flowed. Before the next visitation, which devastated the country, the water was taken from two miles above the town, and in 1849 but 44 cases occurred, and in 1854 hardly one. Hull, in 1832, was supplied with pure pipe water, but so scantily that the poor had to resort to other means to obtain it; 300 people, mainly the poorest, died of cholera in that year. In 1844 a supply was abundantly procured for all classes from the river, and accordingly, in 1849, 1834, persons from all ranks fell victims to this ignorance or negligence of the poisonous effects of contaminated water. In Swords, a little town of some 1400 people, 65 cases of cholera occurred in seven weeks. The water supply was from an unprotected well, subject to great defilement. In the village of Crumlin, out of 165 inhabitants 46 were seized with cholera and choleraic diarrhœa. A single and most superficial pump was the sole water supply, and its produce was often stinking and muddy. Kingstown suffered far more than Dublin in proportion to population, and at least one of the promoting circumstances was a wretched supply of water, exclusively supplied by wells. After two cases of cholera, one of which was fatal, had occurred in the house of a friend of his (Dr. Mapother), which was situated in one of the best parts of the town, he poured a quantity of carbolic acid into the sewer, and found that the water of the adjoining well tasted of that substance for many weeks afterwards. It was almost certain that the sewage had in the same way percolated before the appearance of the cholera. The rate in Kingstown was over twice that of Dublin, and higher than that of East London. Although the disease began two months later than in Dublin, the weeks of greatest mortality were the same—the 20th and 27th of October. Dr. Mapother thought there could not be a reasonable doubt that cholera was a malady produced by the entrance of a poison into the human body, the digestive canal being the site upon which it specially fixes. Whether such poison was gaseous or suspended in the atmosphere; whether it was an organized body, vegetable or animal, they knew not; but if the latter supposition be true, we might believe that it could be carried through the air without injury to its communicable power, and that if dried, like vegetable germs, it might regain its power by moistening on our mucous surface. If caught by the surface of the mouth or nostrils it would be swallowed, and thus reach the digestive canal, if that be the only habitat where it can develop. The aerial diffusion of the specific germ will account for the wide-spreading of a diarrhœal tendency at cholera periods, and the dilution which such a mode of conveyance necessarily implies, accounts for its impotence or mildness in the vast majority of cases. The diffusion of the same germ in drinking water secures the impregnation of the system with a much larger dose of the poison than can ordinarily be inhaled by the lungs from the surrounding air, and in this way can be explained, by the light of Pettenkofer's views, the enormous fatality which has followed upon such contamination. The second concurrent circumstance is terrestrial. As far as Dr. Mapother had been able to ascertain, the same streets in this city, which had been lately attacked, were those which suffered in the two previous epidemics. The local miasm-producing condition, according to Pettenkofer, is the existence of a porous soil impregnated with human excreta, not necessarily choleraic, and over-lying springs at no very considerable depth. The most favourable time for the specific excitant germ to be received into such a locality is, when the springs have just sunk unusually low after having been unusually high, or when hot dry weather succeeds rainy weather; the rain would raise the sub-soil water, and when it sunk during the drought, the high temperature would promote the decomposition of the organic matter it left behind.

The two best cases in illustration of the indispensable presence of a porous, moist, and impure subsoil which Pettenkofer gives are as follows:—The transport ship *Carnatic* was lying off Madras waiting to embark troops, whilst an epidemic of cholera was raging there. In the mean time, the sailors were as usual allowed their liberty days ashore, on a soil predisposed and amidst a population succumbing to this disease. The troops for which the transport was waiting, on coming down to Madras from an uninfected inland country, were, by a well-informed commanding-officer, marched right through the town, without halting in it, and the ship put to sea. After seven days the cholera broke out among the sailors, but, though they were nursed by the soldiers, they communicated the disease to none of them, the contagious factor of cholera being present in abundance, but the peculiar soil for the production of the miasmatic condition being of course absent. In like manner, the sailors in Admiral Dundas's flag-ship *Britannia* fell ill, sixteen days after leaving Varna, with cholera of a most virulent type, and though so great a mortality took place on board

that they were compelled to supply themselves with additional hands, from an uninfected ship which they fell in with at sea, and to transfer some of their own sick to it in return, not the least communication of the disease to the fresh ship's crew took place.

Suspecting that there was a close relation between the prevalence of cholera and the presence of water-courses in a neighbourhood, Dr. Mapother marked on a modern map of Dublin the streams which are traced on Speed's map (A.D., 1610), and Rocque's map (1756), afterwards dotted in the spots where all the deaths by the late epidemic ensued. The result surprised him, for there is the closest correspondence between these circumstances. Three-fourths of the deaths occurred within 200 or 300 feet of these water-courses, and the remainder are scattered singly over the city. There are few cities more completely encircled and intersected by water-courses than Dublin. The Royal and Grand Canals are ditches of stagnant water, and form a circle very nearly complete round it, the only break being between the docks at James's-street and Broad-stone, a distance of about a mile—along high ground, too, which would throw water back.

The Liffey runs through nearly the centre of the city, and if its low level makes it improbable that it induces an understratum of water in its neighbourhood, it contributes to the production of cholera by the stagnation and rotting of the sewage cast into it. The returning tide carries back any sewage which may have flowed seaward, and salt water encourages its putrescence. The minor streams are—the Poddle, which, entering the city at Dolphin's-barn, divides into many branches, and flows through the entire of the south-western quarter of the city, and communicated with the ditch around the old walls of the city. Another stream, probably the Tongue, which Provost Baldwin directed from the Dodder at Clonskeagh, flows through Camden-street, Upper Mercer-sreet, and Clarendon-street, to open by a smaller branch into the Liffey at Aston's-quay; and a larger one runs across Grafton-street (where, by its bursting, a woman was drowned in a kitchen) towards Townsend-street and George's-quay. Another water-course is traced on old maps at Baggot-street, Hamilton-row, through the College-park (where it is remembered as the Haha), and Shaw-street, to join the Liffey at City-quay. The Camac, arising near Rathcoole, courses through Kilmainham, Bow-lane, and Watling-street to the Liffey. The sewage of the Richmond Barracks flows into the river, and the nuisance thus created is at present the subject of litigation. It formerly bounded Usher's-island on the south. On the north-side, the Bradogue entering at Grangegorman, passes through Bolton-street, Boot-lane, and Arran-street, to open at Ormond-quay, and a stream is traced in Rocque's map passing from Phibsborough, across Eccles-street and Dorset-street, to join the river just named. On the same map, there are pools figured at Gregg's-lane, Mabbot-street, Earl-street, Ellis's-quay, Island-street, and City-quay, just where cholera lately raged. Dr. Mapother gave a list of cholera fields along these water-courses, each having a radius of 440 feet; and said that there were, in fact, very few cases of cholera in Dublin, except in houses built over forgotten streams and pools imperfectly drained. The streets which stood highest above water-mark were notably free from cholera, or what to his mind more fully demonstrated their salubrity—it was introduced, and did not spread, but this rather depended on the concurrent absence of water-courses. A sudden fall in the city, by the gravitation of sewage and sub-soil water, promoted the disease notably; for instance, Cook-street runs along the river Liffey, only 300 feet from it, and 24 above high water-mark, while southwards the ground rises so fast that the parallel street, High-street, which is about 200 feet distant, is 36 feet higher. The district near Ballybough-bridge, or as it is classically called, "Mud Island," and that around St. Laurence O'Toole's Church, is reclaimed land, where drainage is necessarily imperfect, and in which the houses are so wretchedly constructed, that the mere earth, or at most, boards laid directly on it, forms the floor. To the same character of soil the prevalence of the disease in the neighbourhood of Montgomery-street may be assigned. Hanover-street, East, around which many deaths occurred, was also built on reclaimed land, and the drainage of that district had been much obstructed since the Grand Canal Docks were constructed. Without the utmost care being taken in draining land reclaimed from the sea, and in building houses thereon, it can never be salubrious. With regard to susceptibility or receptivity, it is incident to all that the humbler classes suffer most from a cholera outbreak. Scarcely a person in comfortable circumstances died within the City of Dublin during the last visitation of the disease. Pettenkofer considered that a watery condition of the blood, with a superabundance of imperfect fibrin, was favourable for the taking of cholera, and this condition which existed normally in the child, and in the aged, could be produced artificially in ourselves or in the lower animals by overwork, and by the partial deprivation of the animal and other nitrogenized articles of diet, which are so essential to vigour and firmness, and to resistance to all catching diseases. Experience has shown that cholera is most fatal to the very young, to the very old, and to the very poor, to whom animal food is such a rare luxury. The striking immunity of the Whitechapel Jews in the last, as well as all former epidemics, was due to the timely distribution of animal food, and to their excellent hygienic observances, which has made longevity of this race one-third greater than that of most European people. In India, the outbreaks so often follow a failure of the rice-crop, that some have attributed the malady to some fungus from that grain. The want of free air to oxygenate the red-cells of the blood, and the neglect of cleanliness of the skin, may be other predisposing causes amongst the poor. Intemperance by depressing health, and especially by checking the removal of carbonic acid and other excrete matter, was also referred to by Dr. Mapother as a predisposing cause of all catching diseases. It was recorded that thirty cases of cholera occurred on New Year's morning, 1832, in Gates-head, no case having been previously seen. Nearly all the victims had been intemperate the night before. It was probable, however, that some antecedent conditions of the alimentary canal existed. Dr. Mapother concluded by describing the preventive and curative measures which, he thought, should be adopted, and advocated the establishment of refuges for the families of those attacked, while their houses were being disinfected.

The PRESIDENT said that Dr. Mapother's paper was a most interesting and valuable one, containing as it did facts in connection with the cholera epidemic down to the latest moment. The Society owed a debt of gratitude to Dr. Mapother for bringing before them that interesting communication, which exhibited so much labour and research.

The Society adjourned to February 15th.

HARVEIAN SOCIETY OF LONDON.

JANUARY 18TH, 1867.

Dr. POLLOCK, President of the Society, in the Chair.

DR. C. DRYSDALE related the case of a man, aged 36, a cab-driver, who had suffered from cyanosis and heart disease as long as he remembered. The patient's nose and cheeks were purple; his finger-ends were livid and clubbed; a systolic, blowing murmur was heard, loudest at the apex, but also loud at the base of the heart. There was much crepitant râle and high-pitched percussion, not below the left clavicle. The patient was always very cold, even in summer, but was able to work.

In another case now under his care at the Metropolitan Free Hospital, in a man aged 60, the rate of the pulse was only 36 in a minute. This man, too, suffered from great chilliness. He had had rheumatic fever some years ago. No heart disease was perceived in this case. Dr. Drysdale had recently had another patient whose pulse was only 32 in a minute.

The PRESIDENT had never seen clubbing of the fingers in any case where phthisis was absent, except in one or two rare cases of empyema. Cyanosis, contrary to Rokitansky's assertion, was, as in the case above mentioned, by no means unfrequently followed by phthisis.

Dr. CHAPMAN remarked that in cases of slow pulse the temperature of the body was usually very low. Dr. Fergusson, shortly before his decease, had suffered from a very slow pulse.

Mr. WEEDEN COOKE mentioned the case of a lady from America who had consulted him for cancer of the breast, and whose pulse was only 26. Her fingers were often frozen. Another lady was obliged to use warm water in the morning to make her fingers bend, and in winter time or cold weather they remained frozen all day long.

Mr. ADAMS mentioned the case of a surgeon whose pulse was habitually 28. He had suffered from fever in the Crimea, and was always cold—sometimes very cold; but, on the whole, had good health. He could not use stimulants, as they proved hurtful to him. There was no disease of the heart in this case.

Mr. HOLTHOUSE thought that slow pulse was to be attributed to some affection of the organic nerve centres. In syphilitic disease of the brain and in injuries to the brain the pulse was often very slow.

A paper was read by W. Adams, Esq., F.R.C.S.,

ON THE TREATMENT OF HIP-JOINT DISEASE.

The author divided hip-joint disease, in its ordinary form, as it usually occurs in children, from four to fourteen years of age, into three stages—the *first stage* extending from the commencement of the symptoms to the formation of abscess; the *second stage* extending from the formation of abscess to the bursting or opening of the same; the *third stage* the complete destruction of the joint, after the bursting or opening of the abscess, more or less extensive disease of the bone, dislocation, &c.

After adverting to the symptoms and progress of the disease in its different stages, the author referred to the different views entertained of the pathology of the disease, with respect to its commencement as a primary affection in the cancellous tissue of the bone, the view entertained by the late Sir B. Brodie, or in the articular cartilage, and alluded to the difficulty of determining this point, from the absence of post-mortem examinations at this period, as such examinations could only be made when death occurred from some other cause during the early progress of hip-joint disease. One such opportunity had occurred to Mr. Adams, and the details were, he said, recorded in the first volume of his "Translation of Chelius' Surgery." The appearances in this case corresponded with those observed by the late Mr. Acton Key in a similar case, in which death occurred in the first stage of hip-joint disease, and proved that in these cases the disease commenced, as Mr. Acton Key had remarked, in the round ligament, which, in both instances, was proved to be the seat of chronic inflammatory changes, extending to the adjacent synovial membranes, and in Mr. Adams' case, to the commencement of ulceration of cartilage in the neighbourhood of the ligaments. Essentially, however, the articular cartilages and bones were healthy in both cases. From the clinical history of these cases, supported by the post-mortem examinations referred to, Mr. Adams believed that hip-joint disease usually commenced in the round ligaments as the result of an accident in which this ligament was violently strained or partly torn, and that from this spot, as a centre, the disease extended to the rest of the synovial membrane, the articular cartilage, and, at a later period, to the bone. This Mr. Adams believed to be the ordinary course of events, although in some cases other structures might be primarily involved.

As to treatment, Mr. Adams' observations referred principally to the first stage of the disease, during which it is alone possible to cure the affection.

Regarding this disease as a slow form of inflammation, essentially chronic in its character, and associated with a condition of constitutional debility, and generally a strumous diathesis, Mr. Adams was opposed to the application of leeches and all severe counter-irritation, such as blisters, moxas, issues, the actual cautery, &c., as tending to exhaust the powers of the patient rather than to benefit the disease. Essentially he relied upon rest to the joint, with warmth and moisture constantly applied. Mr. Adams also opposed anti-phlogistic treatment internally, and especially the use of calomel, or what is called the alterative treatment, as tending to lower the constitutional powers of the patient, and relied upon the exhibition of tonics, with cod liver oil, hypophosphites of lime and iron. With regard to the means of securing rest to the joint, a paramount necessity, Mr. Adams was opposed to long-continued recumbency by confining the patient to bed or to his couch. Complete recumbency he thought necessary only for a short time during the more acute symptoms, with severe pain, when he used either the straight splint, or the more modern plan of extension by weights attached to the leg. Of the latter treatment he gave several examples, and alluded to an able paper by Mr. Marsh in the Bartholomew's Hospital Reports. Generally Mr. Adams employed a leather or gutta-percha splint, of larger size than ordinarily used, and moulded to the side of the body and limb, whilst the latter was held in the straight position, so as to overcome all muscular contraction, chloroform being administered in some instances. The first effect of such a splint, when properly made, was usually to relieve pain and enable the patient to move about with the assistance of crutches, thus materially benefiting the health and doing good to the disease. In the second and third stages Mr. Adams relied chiefly on the same principles of treatment, and preferred to open abscesses rather than allow them to attain a large size.

Dr. Anderson did not agree that abscesses of this kind should be opened early. He believed that the disease commenced in the capsule of the joint. In a few cases in adults he thought that leeches, counter-irritation, and tincture of iodine proved very serviceable. He thought that in all probability the bone did not go so deeply into the cavity as in health. The splint recommended by Mr. Adams was of great service. Children feel much comfort from it. He would feel inclined to use more active treatment at first than that recommended by Mr. Adams.

Mr. Owen thought that the local application of the splint was not quite necessary at first. Mr. Adams' first stage, too, was a very long one. Occasionally the disease occurred in strong persons, and the inflammation was sometimes very acute.

Mr. Holthouse said that the diagnosis of hip-joint disease was usually very clear. It could only be confounded with psoas abscess. Acute cases were rather exceptional. As to treatment he must protest against the administration of two or three glasses of port wine, and he thought stimulants were rarely indicated, though they *sometimes* were, and in such cases the pulse fell on giving them. Local treatment was of no use. Blisters were injurious. Hot linseed-meal poultices were the only application likely to prove useful. Splints should be put on as soon as possible, although they never had the effect of drawing the head of the bone out of the socket, which was impossible, since it was held therein firmly by atmospheric pressure. The shortening was usually more apparent than real, as might be ascertained by measuring. Dislocation was rare. Special apparatus like those described by the author were sometimes very useful. It was not advisable, he thought, to open the abscesses in all cases.

Dr. Drysdale thought the treatment for all strumous diseases consisted in the attainment of good food and open air exercise, as far as possible, for the patient. He could not believe that so much wine could do good in cases of hip-joint disease in children, and he was certain that calomel and counter-irritation and leeches were extremely injurious in all diseases of true scrofulous. Mr. Hilton's plan of physiological rest for the part affected seemed to him to be the wisest plan of treatment, accompanied by good nourishment and fresh air, &c.

Mr. Weeden Cooke said that counter-irritation should rather be termed irritation in the treatment of hip-joint disease. He questioned whether any case recovered without some shortening of the limb. In a great number of cases of recovery the patients limped afterwards. It was very gratifying to him to hear that Mr. Adams so strenuously advocated the analiptic means of treatment for this disease, and opposed the meddlesome treatment by means of calomel and opium, leeches, &c., which were formerly so much recommended. The lectures of Mr. Hilton on physiological rest, and the ideas therein expressed, were, in his opinion, the most important of all the late accessions to the scientific practice of the art of surgery.

Dr. Anderson could not sit still without protesting against the idea of the non-utility of counter-irritation, and of calomel and some cases of hip-joint disease. Calomel and opium, which was given for two or three days, he had found of great use in case of the disease occurring in adults.

The President said it was a remarkable fact that so great a change seemed to have come over the ideas of practitioners on the subject of the administration of calomel. Was the profession ready to come to the conclusion that calomel and opium were of no use in acute inflammation? Without going so far as this he would observe, that as hip-joint disease almost always occurred in persons whose vitality was low, or who were of a strumous constitution, he thought it should be treated on the same principles by which other diseases of the tuberculous kind were treated—namely, by supporting as far as possible the constitution by means of all the most invigorating and nourishing means in our power, and he entirely agreed with Mr. Adams that all violent counter-irritation or local means should be laid aside.

CURRENT LITERATURE.

A translation of Liebig's *Food for Infants*, by the Baroness Lersner-Ebensburgh, has been published by Mr. Walton, of Gower-street. It furnishes full information as to Liebig's substitute for Breast Milk, and the original is rendered into very good English.

The translator, induced by the difficulty of inducing the poor to carry out the directions with sufficient care, has arranged for a company to supply the food in a liquid, milk form, fresh every day, in any part of London and the suburbs, at the low price of sixpence per quart. The effort is one which

must depend for support on the medical profession. This will not be wanting, since only good could result from the general use of better food for infants than they now usually obtain.

Dr. Alexander Robertson has published a valuable contribution to the *Pathology of Aphasia*. His pamphlet consists of a paper, read at the annual meeting of the Medico-Psycological Association at Edinburgh, and afterwards printed in the *Journal of Mental Science*. It is an able clinical review of the present state of the subject, founded on three cases that came under the author's care in his official capacity as Physician to the Glasgow Hospital. We have much pleasure in extracting Dr. Robertson's conclusions on the subject, as follows:—

"There is a lesion usually in the left hemisphere of the brain, of efferent fibres passing between the convolutions and the great co-ordinating centres, probably at some point of a line extending from the external frontal convolution to the corpus striatum, so that voluntary motor impulses for the articulation of language cannot be transmitted. The *essential* morbid change is, therefore, *motor*, and not *mental*. However, there is in most cases an accompanying degeneration of the powers of the mind, which varies in degree in different persons, but in the majority distinctly involves the general faculty of memory. The condition of the intellect does not differ from that which is associated with non-aphasic hemiplegia; but it would seem that the emotional powers are less frequently disturbed. It follows that there is no necessity for supposing the existence of an organ for language, as a defect in transmission along with general weakening of the mental faculties is competent to account for the various phenomena hitherto observed in the sufferers from aphasia.

"At present there is no sufficient explanation of the almost constant occurrence of the lesion in the left side of the brain. Theories have been advanced which either involve the belief in a departure from the general plan of nature in the quality of our "organs of relation," or suppose, what seems inconsistent with the wisdom of Divine arrangement, that organs have been created which never discharge the special functions with which they were endowed. It is suggested that it would be well, in the first instance, to establish beyond doubt that the absence of aphasia in morbid states of the right hemisphere is not to be accounted for by the escape of parts usually implicated on the left side, owing to some slight anatomical difference, such as is known to exist between other bilateral organs. Failing this hypothesis, let us search anew for some more satisfactory solution of the difficulty than has yet been proposed."

The Medical Press and Circular.

"SALUS POPULI SUPREMA LEX."

WEDNESDAY, FEBRUARY 20, 1867.

THE POOR-LAW BOARD AND THE METROPOLITAN POOR.

Mr. Hardy, the President of the Poor-law Board, has lost no time in announcing his intention of bringing in a measure for the relief of some of those flagrant abuses which have long been known to exist in connection with the treatment of the sick poor of the metropolis. We say that these abuses have long been known to exist, but it is only at a comparatively recent period that they have attracted the notice of the several newspapers, and have thus been brought before the public. The system of local government, excellent as it is in theory, has been carried to such lengths in the management of the sick poor, that no one dared to expose any misconduct, however flagrant, on the part of the authorities; and the Poor-law Board, which alone had the right to inquire into and control the proceedings of the Guardians, was content to perform its duties with its eyes shut, and its so-called inspectors degenerated into a mere routine. If any Medical Officer dared to advocate the cause of the sick poor who were placed under his charge, he was snubbed by his superiors or dismissed from his post, and his place was soon supplied by persons of less scrupulous character, or endowed with more worldly prudence. As there was, practically speaking, no appeal from the decision of the Guardians, it became with the Medical Officers a mere matter of common precaution to let things in general take their course, inasmuch as any unseemly zeal on their part would only expose them to insult, while the wretched salaries doled out by the Guardians deterred many of the most active and distinguished members of the Profession from entering the Poor-law Medical Service at all. Hence, one very important case to which the Workhouse Infirmaries might have been made subservient—namely, the instruction of the rising generation of medical men, has been almost completely ignored; but we are glad to find that Mr. Hardy contemplates the partial application of these institutions to the purpose in question.

The writers in the medical journals, and ourselves among the number, have so often pointed out the distinction existing between the ordinary pauper and the unfortunate disabled victim of accident or disease, that it is quite unnecessary for us to dilate upon this part of the subject, and we are rejoiced to find that the President of the Poor-law Board has at last opened his eyes to view the matter in this light; and this distinction, in fact, is the basis of his proposed legislature, so far as it concerns the affairs of the Medical Profession. What we have so repeatedly urged in the interests of humanity—namely, that disease and infirmity are not the same things as ordinary pauperism, is now acknowledged as an axiom, and the care of the sick, the helpless, and the imbecile will henceforth, if Mr. Hardy's plan should be adopted, be transferred to more competent hands, we earnestly hope, than those to which this important task has hitherto been confided.

The absurd distinction still existing between the parishes placed under the control of the Poor-law Board and those which are governed by local Acts is to be abolished, and by the repeal of those Acts, the mischievous conflicts between the central authority and the Guardians will cease to occur. The whole of the Metropolitan districts are to be placed under the absolute control of the Poor-law Board,

and whatever might have been the murmurs which such a step would have caused in former days, it seems that the bugbear of centralization has lost its terrors, and people seem now to welcome the new Poor-law scheme as if it were the harbinger of liberty rather than an offshoot of despotism.

The new Bill proposes, then, that a line shall be drawn between the ordinary paupers, who are still to be dealt with by the respective parishes and supported out of the local rates, and the sick and insane paupers, who are to be maintained at the expense of the whole metropolis. Assuming the whole number of persons brought thus under the superintendence of the Poor-law Board to be about 34,000, including children, Mr. HARDY proposes to place all the lunatics, estimated at 2000, and 700 or 800 fever and small-pox patients in separate establishments to be provided for the purpose, thus leaving the ordinary workhouses in their present condition, *minus* the fever and small-pox cases, the imbecile, and the children above the age of two years, who are also to be removed to separate schools. The ordinary sick poor, who are not included in the above category, would be lodged in infirmaries placed under separate Boards of Management, and of these Boards one-third of the members are to be nominated by the Poor-law Board from persons resident in the district, rated at not less than £100 a-year. The obvious meaning of this provision is to take a part of the local management out of the hands of the small shopkeepers who at present are often exclusively chosen as Guardians, and to transfer the trust to persons of position and property, and who would be, moreover, under the direct eye of the Board at Whitehall.

It is proposed to establish four Fever and Small-pox Hospitals for the whole metropolis, supported out of a general rate, and this feature of the scheme is one worthy of the greatest approbation. The great danger arising from the existing system of sending fever patients to or keeping them in the workhouse infirmaries has been so often exposed that it needs no comment, and the establishment of such hospitals has been so long and so urgently demanded that it is only extraordinary that they have not been erected long ago.

Another important feature of the new Bill is that the salaries of the medical and other officers will be paid out of the general rate, and thus a great amount of local jobbery will be prevented, and the Medical Officers will occupy a more independent position than they have yet enjoyed.

Notes on Current Topics.

THE CITY DISPENSARY, LONDON.—This useful charity was instituted on the 1st day of January, 1789, professedly for the relief of the sick and diseased poor, and since that date has been entirely supported by voluntary contributions. The anniversary festival was celebrated by a dinner at the London Tavern, on Tuesday, the 12th instant, when the Lord Mayor presided. From the report we learn that the premises now occupied will be almost immediately required by the Metropolitan Board of Works for the formation of the new street from Blackfriars to the Mansion House, and as the lease has expired no compensation will be granted. The great rise in the value of property in the city will necessitate a large increase of expenditure, so that the committee feel called upon to make an urgent appeal. Surely such a city as London cannot let one of its oldest charities want for funds. An institution of this nature ought certainly to be rent-free. Considering the time it has been established, money ought to have been accumulated to purchase a suitable site and build a dispensary. We would recommend the committee at once to start a building fund, and so see whether the citizens will not soon endow the charity with a freehold.

The following figures from the report presented at the dinner show what has been done during the year:—

REPORT OF PATIENTS.

Patients on the Books 1st January, 1866, 1010; admitted during the year, 11,600; total, 12,610. Discharged, cured and relieved, 11,314; discharged for irregularity, 31; died, 56; remaining on books 31st December, 1866, 1209; total, 12,610.

Upwards of 3000 visits have been made to patients at their own houses, and 860 cases of emergent disease attended without letters, besides choleraic cases—as under:

CASES OF DIARRHŒA AND CHOLERAIC DISEASES.

During the week ending	Number of Patients	During the week ending	Number of Patients
21st July ...	... 100	Brought up	... 2256
28th „ ...	... 152	22nd September	220
4th August ...	... 285	29th „	... 159
11th „ ...	... 448	6th October	... 228
18th „ ...	... 308	13th „	... 236
25th „ ...	... 306	20th „	... 185
1st September	... 214	27th „	... 148
8th „ ...	... 233	3rd November	... 88
15th „ ...	... 210	10th „	... 108
Carry up,	2256	Total,	3628

THE OBSCENE QUACKS.—We are glad to find that the practices of the obscene quacks in thrusting their filthy bills and pamphlets into the hands of the passers-by in our great metropolitan thoroughfares is again beginning to attract attention. In a letter addressed to the *Pall Mall Gazette*, Dr. Forbes Winslow has offered some very sensible remarks upon the indecency of the proceeding, and upon the injury which must be inflicted upon the rising generation by the perusal of the contents of these prurient and mendacious productions, the real object of which is of course to allure the unwary into the dens of the advertising quacks for the purpose of extortion. It is to be hoped that the *Pall Mall Gazette*, which has already done so much for the interests of the honourable practitioners of medicine, will continue to agitate this subject, and the more so, as we learn that legal steps are now being taken in order to put a stop to the distribution of the circulars and pamphlets to which we allude. It is quite disgraceful to our civilisation that the minds of youth should be contaminated by the medium of this moral poison, and it is an anomaly in our system of police that while any obscure and miserable shopkeepers who sell indecent books are punished with imprisonment, the rascals who are gaining large incomes by trading on the vices, the follies, or the fears of the ignorant are allowed to escape with impunity.

Cholera at Jersey.—We regret to hear that this disease has broken out in the Channel Islands. The first cases reported took place on Sunday, the 10th instant. By Tuesday evening, fourteen cases had been reported. The next day eleven new cases occurred, all of which were fatal. Although the majority of the cases have taken place in the worst parts, yet the disease has not been absolutely confined to these. Among the measures adopted to arrest the progress of the epidemic, we may mention the erection of tents by the military, in a healthy locality, to which the families of those attacked can be removed, while their houses are thoroughly disinfected, and the setting apart of a portion of the General Hospital for the reception of the victims of the disease.

Life Assurance and Travellers.—Every young man who has entered the married life and has prospect of a family may have recourse to an Assurance Company, as one means of making provision for those dependant on him. In any respectable and well-established office he may be sure of ultimately securing his object in cases in which he could not do it himself, and at the most moderate expense. The rate of premium for life assurance in these Institutions is based, as everyone knows, on an average of human life, the correctness of which has been tested by a series of years; so that while securing the interests and permanence of the Society, the annual payment of the insurer is not in excess of what it ought to be. But there are certain companies who exact an additional premium if he cross the sea to America, or to any other part of the world except Europe, and fix certain bounds beyond which he is not to pass. The Sun Life Assurance in its directions as to foreign residence, says, "on payment of a small extra premium for the risk of the voyage only, the assurances will be extended to cover the risk of proceeding to and residing in British North America, the United States (east of the Mississippi, and not further south than the latitude of Washington), parts of Australia, New Zealand, the Cape of Good Hope, and Natal." The amount of additional premium is not stated, but we learn from another source, that in the Equitable, the London Assurance, and the Atlas, it is ten shillings per cent.; in the Sun, the Law Life, and the Economic, it is five shillings per cent., while others require no additional premium at all. Now, the question is, on what ground do these officers found their claim to additional indemnity, and impose their restrictions? The premium in every kind of insurance is always considered to be in proportion to the risk. But is there more danger in crossing the Atlantic than in a railroad journey from London to Edinburgh? or, is there more risk in a trip to America, or the Cape, than men are often exposed to in some of the ordinary professions and employments, and amusements of life? Again, as to place, is a man safer in North America, or part of Australia, or Natal, than he would be in the Southern States? or is his life in more peril on one side of the Mississippi than it would be on the other? There seem to be in these matters no certain data, no ascertained facts, no logical conclusions on which these societies can proceed, and the difference in their regulations implies as much. Why should one demand ten shillings per cent. extra premium, and another nothing at all? Whether things should remain as they are, and what effect such uncertainty and disproportion may have upon their Institutions is for them to consider.

The Army.—From the Appendix to the Report of the Recruiting Commission, we learn that there were on Jan. 1st, 1866, 77,701 serving at home, 48,806 in the colonies, and 68,042 in India. The casualities in a single year amounted to 23,008—viz., 16,086 discharged, 3519 desertions, and 3403 deaths. Of the 16,086 discharged, 6088 had completed their service, 2276 purchased their discharge, 4950 were invalided, 1960 were permitted to leave by indulgence, and in 812 cases the cause was not stated. To supply this deficiency from casualties in the year, only 14,430 recruits joined the army, and 1010 men rejoined it after desertion; 17,122 of the casualties occurred in the army at home, 3569 in the colonies, and 2317 in India. Taking an average of five years, 1861-5, to 1000 strength, the total casualties were 94—viz., net loss by desertion, 11; death, 17; invaliding, 25; discharged by indulgence, 11; completion of service, 15; purchase, 9; other causes, 1.

Surgeons for the Navy.—We believe the recent scheme of the Admiralty for subsidising medical students, which called forth such a storm of just indignation, may be considered to be definitively abandoned. The students have proved themselves worthy the noble profession they have chosen by repulsing the insult offered. We know that large numbers would be very glad to enter the navy could terms acceptable to a gentleman be obtained. The Lords of the Admiralty both insult and deceive the members of a liberal profession, and then wonder at the dearth of candidates for appointments in the navy. Let any one of them subject his domestic servants to the same indignities that Assistant-Surgeons have had to endure, and he will soon have the pleasure of waiting upon himself. To say nothing of Jeames and others of equal importance in the household, the youngest errand-boy and poorest scullery-maid would very soon "give warning," and quite right, too! While the Admiralty withholds bare justice the profession must decline to enter the naval service.

Industrial Dwellings.—Labourers and artizans—that is, the working classes, as distinguished from the rest, form a large and important part of the population, to whose health, and convenience, and comfort we are bound to pay attention. They, as a class, ought not to be overlooked, because, though occupying inferior grades, the relation they sustain to the great whole cannot be dispensed with. Take them away, their skill and their toils, and the social chain would be snapped asunder. They have their claims, therefore, as well as the rest of the community, and those claims cannot be disregarded without danger to those around them. Hitherto, we cannot but think, they have been sadly overlooked with regard to their dwellings. While houses have been built in every direction befitting the condition of almost every rank above them, their necessities, for a long time past, seem to have been entirely unheeded. Their very habitations have been pulled down, and they have been left to seek shelter where they best could. Latterly, attention has been aroused to this state of things, by the misery, the disease, and the mortality which have followed, and which have endangered the neighbourhood. We are glad to notice that in the House of Commons Mr. M'Cullagh Torrens moved for leave to bring in a bill on this subject. From the information he had received, he considered "matters were getting worse," and that no voluntary efforts could possibly remedy "the want of accommodation

and the amount of misery which resulted from it." He asks the Government to advance one million at three and a half per cent. out of the forty-six or forty-seven millions, the savings of the working classes. This would provide 35,000 dwellings, and the "sum advanced would be charged by way of mortgage on the buildings so erected." From the remarks of Mr. Walpole we hope the Government will encourage the measure, and that ere long we shall see those "fever nests," which now surround our metropolis, destroyed; and instead of them comfortable cottages or lodgings erected, where the industrious, at means within their reach, may live in comfort and cleanliness, near to their employments, and not forced away into the suburbs as they now are.

Kearns *v.* Storks.—This case having ended in a compromise, it has been announced by the solicitors of Mrs. Kearns that they will shortly prosecute Sir J. Olliffe, Physician to the English Embassy at Paris, and one of the medical men who signed the certificate that Mrs. Kearns was insane. Here is another illustration of the dangers to which our profession is exposed. If Mrs. Kearns or her lawyers failed to show that Mr. Storks improperly confined her in a lunatic asylum, what possible ground can there be for an action against the physicians who gave their opinion that she was a fit person for such restraint?

Hunter's Day at the College of Surgeons.—The forty-third Hunterian Oration at the Royal College of Surgeons of England, was delivered on Thursday, the 14th inst., by Professor Hilton, and those who had the pleasure of listening passed a very profitable hour. There are, perhaps, few men in the profession who might be expected more thoroughly to appreciate the greatness of Hunter's mind than Mr. Hilton, and we can only say that on this occasion he fully came up to the expectations that had been formed. One of the most beautiful illustrations of the value of Hunter's patient truth-seeking spirit was selected by Mr. Hilton to show how immeasurably he was in advance of his contemporaries, even in points on which we have since learned much. We allude to Hunter's doctrine on sympathy, which, in several of its ramifications, was shown to have been but the rough expression of what has since been worked out, or the accurate clinical records of what has since been explained. Mr. Hilton half apologized for the dryness of some of the details he introduced on this point, especially the reproduction of Hunter's diagram of sympathetic action, and the quotation of its explanation. For our part we consider it one of the most valuable parts of the oration, and scarcely less interesting, although naturally less exciting, than the eloquent peroration which drew forth the applause of the crowded theatre.

The Lunacy Laws in France.—A case was lately heard in part at Westminster, but arranged by mutual consent, in which a middle-aged female sought to recover compensation for having been consigned to the Lunatic Asylum of Charenton, near Paris, at the instance of a gentleman who was the son of the late Mr. Sergeant Sterles. As the case terminated somewhat abruptly the defence was not heard, and hardly any medical evidence was adduced. As it is understood that the plaintiff in the above case is to receive a pension for life (a proposition to that effect having indeed been made long before the action was brought) it might have been supposed that the matter would have been allowed to rest, but it seems by a letter published in the *Times*, that further proceedings are to be instituted against Sir Joseph Olliffe, the Physician to the British Embassy in Paris, who signed one of the Lunacy Certificates. The *Daily Telegraph* expresses its joy that this course is to be taken, but we, in common with most other respectable journals, learn the intelligence with regret. Considering that Sir Joseph Olliffe, Foville, and Calmeil, are all concerned in the case, there can be no doubt, even before the action is brought, of the perfect *bona fides* which must have actuated those gentlemen, but in the present aspect of the matter we can make no further comment.

Chinese Sugar Grass.—A letter appeared in the *Times* of Saturday, complaining that the person who offered to send a few grains of this seed for a stamped envelope has not replied to the letter sent by a correspondent; and the *Times* adds a note to this effect :—"We have received at least a hundred letters telling the same tale." Under these circumstances, as we informed our readers of the offer, we think it right to add the "caution."

Pathology *v.* Chemistry.—An inquiry was held on the 5th inst., at Belfast, into the death of a servant girl who had died suddenly in the house of a solicitor in that town. It appeared that suspicions were entertained that death had been caused by an effort to procure abortion. Dr. Hodges, Professor of Medical Jurisprudence in the Queen's College, reported as follows :—

"Separate examinations were made of the substance of the stomach and portions of liver, of the spleen, of the contents and washings of the intestines, for mineral poisons; but no trace of mineral or saline poison was discovered.

"The stomach and also the contents of the intestines were treated by alcohol and water, and also submitted to examination by dialysis, and to Sta's and other processes, for the detection of the poisonous alkaloids and other organic poisons, but no trace of oxalic acid, aconitine, or other organic poison was detected. The parcels received on the 17th inst. consisted of a large tea-cup. The tea-cup contained two ounce by measure of a slimy, dark-coloured, sour-smelling liquid, stated to consist of matters vomited by the late Ann M'Grady. I found it to contain pieces of wool, lumps of bread, or cake, a common pin, a feather, a strip of black ribbon, and some black thread. The contents of the cup were examined by the microscope, and also by chemical processes, for both mineral and vegetable poisons, but no trace of poison was found to be present.

"The red-coloured liquid contained in the bottle measured one ounce and a-half. It had a fragrant, somewhat aromatic, odour and bitter taste. One half ounce of it was found to contain eleven grains of a yellowish-red extract dissolved in dilute alcohol. The results of a series of examinations of its properties showed the absence of strychnine, astropine, aconitine, &c., and proved that it was not poisonous.

"To confirm the accuracy of the conclusions afforded by the chemical analysis, some physiological experiments were made on rabbits with the extract of the red liquid, and also with the concentrated solution of the matters dissolved from the stomach and intestines of Ann M'Grady. Portions of the extracts were applied to the eyes of rabbits, and also introduced into their stomachs, but no poisonous or other effects such as the poisonous alkaloids produce were observed.

"My opinion, therefore, is that no one of the substances examined by me in this case afford any indication that the deceased died from the effects of poison."

Dr. Hume (Crumlin) was examined, and said that the

deceased was a patient of his in the month of April 1866. He found by his dispensary-book that he had treated the deceased for anasarca, principally swelling of the legs and red spots. The legs were tender and painful. So far as he recollected, she was in general bad health, and there was an absence of the periodical ailments of women. She got better under his treatment.

Dr. Angus M. Porter was examined, and deposed that he made a post-mortem examination of the deceased on the 5th of January. The brain was quite healthy, but there was a slight congestion of one of the membranes. There was a slight diffusion of the investing membrane of the lung; liver congested; lower part of the gullet and stomach inflamed, especially pylorus; duodenum highly inflamed, and containing kyle; large intestines, slightly congested; heart perfectly healthy; spleen congested. The witness was further examined, and swore to the best of his belief that some time previous to her death deceased had been pregnant; but, from the inflamed state of the womb, and other indications, he believed that the womb had been prematurely discharged of its contents.

The Coroner—What do you believe was the cause of death?

Dr. Porter—My belief is that death was caused by an irritant poison.

The jury found—"That the said Ann M'Grady, having received into the system an excessive quantity of some unknown irritant drug, came to her death from the effects thereof, and the jury do say that the said Ann M'Grady, from the effects of the said irritant drug, and not from any other cause, to the knowledge of the jury, did die."

It is probable that the verdict of the jury may open up in a higher tribunal the question of the relative confidence to be placed in pathological and chemical investigation. The evidence of Dr. Hodges is extremely explicit, while that of Dr. Porter as to the post-mortem appearances is equally distinct, and if the observations of both gentlemen may be accepted as equally reliable, the question will not prove easy of solution.

Hospital Rules for Resident Medical Officers.—There are three resident Medical Officers in Sir Patrick Dun's Hospital; one for the Apothecary, and two Medical Scholars of Trinity College, Dublin, who discharge the duties of resident pupils. The following are the Rules of the Board of Governors respecting the Resident Medical Officers, passed on the 22nd of January, 1867:—1. One only of the three Resident Medical Officers may be absent from the Hospital at the same time; and such absence shall not exceed three hours in each day. 2. No Resident Medical Officer shall absent himself from the Hospital for more than three hours without reporting the cause of such absence to the Board, or without their special leave obtained beforehand. 3. It shall be the duty of the gate-porter to report the hours at which the Resident Medical Officers return to the Hospital at night. 4. The Resident Medical Officers are not permitted to entertain their friends in the Hospital.

Mr. Humphreys held an inquest recently on the body of a child about two years old. The jury returned a verdict of "found dead from blood-poisoning—from want of proper space wherein to live." A man, his wife, and four children had been accustomed to live in a room at a rental of a shilling a-week, and which did not contain sufficient cubical space for the breathing of one adult. The husband and one of the daughters died there within the last two years, and when the cholera appeared in the neighbourhood some time since, it selected the house to which this room belonged for its earliest display.

HEALTH OF THE UNITED KINGDOM.

From the Registrar General's quarterly return we select the figures which we think will be most generally interesting to our subscribers.

In the three months of the past year ending the 31st December, the births of 246,519 children, and the deaths of 157,660 persons of both sexes were registered in the United Kingdom. The corrected death-rate of the quarter is 2·163 per cent., which is less than the proportion obtaining in England and Wales alone.

The return for England and Wales shows that the number of births in the same period was 185,010, which exceeded those in the last quarter of 1865 by nearly 6000. This increase was spread more or less over the whole kingdom; the only exception being Cornwall, where there was a striking decrease, caused it is supposed by emigration. The anual birth-rate of the quarter was high, being 3·447 per cent. against 3·322, the mean of the corresponding quarters of the last ten years.

The deaths in the 92 days of the last quarter were 117,187, leaving an increase in the population in England and Wales alone of 67,823, and showing a mean death-rate of 2·184 to 100 of the population, which is lower than the previous ten years' average by ·021, and not higher than the last summer quarter, the prevalence of cholera in East London and different parts of the kingdom nothwithstanding.

London and twelve other large towns are thus classified according to the rate of mortality per 1000:—Bristol 21; Birmingham 22; Hull 23; London 24; Sheffield 24; Salford 26; Leeds 28; Glasgow 29: Manchester 30; Edingburgh 30; Liverpool 33; Dublin 34; Newcastle-on-Tyne 37.

The mortality in the country districts of England was lower than in the town districts, the rate of the former being 19, and that of the latter 24 in 1000, but in both below the average in nearly an equal degree.

The Registrar-General remarks that, "the chief characteristic of the season is the diffusion of cholera over the remotest parts of the kingdom, and its restricted ravages everywhere except where the people are living in the open violation of the laws of health." This is saying in other words that, if the recurrence of the evil cannot be wholly prevented, its ravages by proper care may be kept within very limited bounds; but if sanitary measures are foolishly neglected, the consequences to a neighbourhood may be fearful in the highest degree. He mentions various places where the epidemic occurred, in connection with their hygienic peculiarities, and a selection from these will show the justness of his remarks. In London the deaths from cholera were 834, and it is an open fact, of which we need only remind our readers, that the greater number occurred at the East end where the dwellings are overcrowded and unwholesome, and where considerable impurity was found in the water supply. There were 8 deaths in St. Leonard, close to the river Exe, which receives all the sewage of Exeter, and is dammed up by a weir at the fatal point. Brixham, the fishing town at the entrance of Torbay, supplied with bad water, had 30; a small parish in the Crediton district 15; St. George in Bedminister 12. These isolated outbreaks were rendered fatal by local causes. In Chester (Great Boughton) 83 deaths from cholera, 42 from diarrhœa, occurred—the water with singular irrationality having been for some time taken at a point in the river

immediately below the inflow of several of the town sewers. The epidemic caused 30 deaths in the township of Ince, where the water was bad. There were 107 deaths from cholera in Tynemouth, and 27 of diarrhœa, where the hygienic conditions are of the worst description, and the authorities often appear to slumber in the presence of danger. So of Wales, its sanitary condition is rapidly deteriorating, and the deaths by cholera are proportionally great. In Tredegar district 82 died from cholera; in Ystradyfodwg 24; in Aberdare 29; in Ystradgunlais 50; in Llangafelach 31; in Swansea 55; in Holyhead 25.

These are instances of the sad consequences of indifference and neglect, while, on the other hand, as is remarked, "the returns contain many examples of the efficacy of hygienic measures, and afford strong proofs of the doctrine, that if England has suffered less from cholera in the present year than the Continent, or less than England herself in former years, it is mainly due to changes which all Europe can appreciate and adopt. Among other instances, the Black country as it is called, about Wolverhampton, may be cited. The epidemics of 1849 and 1854 destroyed in five districts more than three thousand lives, while in 1866 the mortality has been inconsiderable. The water was formerly impure, and could only be obtained with difficulty in a country covered with pits and works. But the people with commendable energy have brought good waters from a distance, and are reaping the advantages of the change in Wolverhampton, Bilston, and the other towns."

A reference to the "Registrar's Notes," from which we might make some striking selections, would further corroborate these facts, which he presents to the whole nation. We shall simply remark, as we have done before, the wisdom of immediately paying prompt attention to his suggestions, and the folly of disregarding them until aroused by the scourge which our negligence may be instrumental in bringing upon us.

We quote as follows from Mr. Glaisher's remarks on the weather during the quarter at the Royal Observatory, Greenwich:—In October the mean temperature was 51°·3, which was higher than any year since 1863. The mean temperature of November was 44°·3, being 1°·5 below that of last year. That of December was 42°·9, being higher than any year since 1863, when the temperature was 43°·2. The mean high-day temperature for October was below the average to the amount of 0°·5, and those for November and December were above the averages to the respective amounts of 1°·3 and 2°·3. The mean low night temperatures for the three months were above the averages to the respective amounts of 1°·6, 0°·5, and 1°·7. Consequently the days were cold and the nights warm in October, but the days and nights were both warm in November and December.

Correspondence.

THE PURIFICATION OF WATER.

TO THE EDITOR OF THE MEDICAL PRESS AND CIRCULAR.

Sir,—In the review of Dr. Saunders' "Report to the Diseases' Prevention Committee of the City of London Union on the Causes and Prevention of Cholera," which appeared in the number of the The Medical Press and Circular, of 6th inst., I read the following sentence:—"He, Dr. Saunders, examines both the water and the air theories, evidently leaning to the former; and he expressed a fear that we must abandon the hope of rendering impure water fit for drinking by any of the common processes of filtration through charcoal, boiling, or the use of Condy's Fluid."

Having referred to the report in question, it seems to me that you have misinterpreted Dr. Saunders' meaning. The terms in which he refers to the subject are these:—"It has been alleged that the process of boiling renders these germs (of disease) inert, and such was my own impression when, in a former report, I recommended that the poor should be so instructed; but we are assured by Dr. Frankland, that such a proceeding is not sufficient to destroy them. . . . I fear, therefore, we must abandon the hope of rendering impure water fit for drinking purposes by the simple and inexpensive process of boiling, although, perhaps, this in addition to filtration through animal charcoal may suffice to remove many of the grosser impurities caused by the suspension of organic matter; and the potability of such water may be further guaranteed by the addition of a few drops of Condy's Fluid"—pp. 15–16. And again, (pp. 22–23):—"With organic matter held in solution by water in a state of decay it is different, for there can be no doubt that we possess the means of at once oxydising and rendering it inert; and the simplest mode of accomplishing this on a small scale is by filtration through a layer of animal charcoal and the use of permanganate of potash (Condy's Fluid.")

It is, therefore, evident that Dr. Saunders, so far from throwing doubt on the efficacy of Condy's Fluid for the purification of water contaminated with organic matter, has stated in his Report, that although the mere boiling of water cannot be relied on to render innocuous water tainted by organic impurities, the use of Condy's Fluid effectually frees water from decomposing organic matter in solution, and at the same time affords the best means known of guaranteeing the potability of water containing suspended organic germs, which filtration may have failed to remove.

I may add that the proof of the soundness of those views is every week placed before the public in the shape of the analysis of the metropolitan waters which appears in the newspapers, for the substance used to determine the amount of organic matter is permanganate of potash, which if ineffectual in destroying organic matter could not be relied on as a test. Every operation of testing water for organic impurities by means of permanganate of potash implies the destruction of such matter, and hence the purification of the water operated upon; and consequently constitutes a demonstration of the efficacy of Condy's Fluid, which is a solution of alkaline permanganates, and the form in which the permanganate water-test was first introduced, ten years ago, by, yours obediently,

H. B. Condy.

ON NATURAL AND ARTIFICIAL ELECTRICITIES AS THERAPEUTIC AGENTS.

TO THE EDITOR OF THE MEDICAL PRESS AND CIRCULAR.

Sir,—In a recent article inserted in the fifth number of your journal, Mr. Sandham invites the co-operation of gentlemen acquainted with the science of medical electricity, in order to elucidate the subject, and communicate to the profession the result of their experience and researches. I quite coincide with the author in thinking that professional men should by all means assist each other in the diffusion of every kind of knowledge which may contribute to the relief of suffering humanity.

Acting upon this principle, it is now more than ten years since I invited, in some 10,000 copies of various publications, the members of the faculty to visit my establishment, offering at the same time to initiate them into my mode of practice. I also contributed several articles to the *Electrician*, but the editor thought well to curtail my articles of those portions which did not meet his own views on the subject. That gentleman tried to form a special establishment in which he should have obtained the first rank: but the journal and the establishment have both failed long since. So it is, and so it will be, as long as we are content to follow the beaten track of our predecessors. I have now been engaged for about thirty years in the study of medical electricity, during the last fifteen of which I have made a special practice of its application. At the outset I was in the same position as Mr. Sandham—*i.e.*, ignorant of its proper mode of application. I searched, I read, and consulted wherever I could, but found nothing but uncertainty and confusion upon the subject.

Even now, when the science has made great progress, through the labours of eminent men of merited reputation, the student is embarrassed in his choice among the conflicting opinions of so many different masters.

For example, Dr. Duchesne de Boulogne, a surgeon of acknowledged skill and ability, the author of a very elaborate work of nearly 1000 pp., who has discovered the action of certain muscles, and obtained many cures, by the means he employs, confines himself to what he terms "faradization," as the only agent to be used. When I spoke to him of other applications, he ridiculed the idea. On the other hand, M. Beckensteiner (whom I visited at Lyons), has adopted, as a special means, the static electricity produced by the electric machine. I have seen him operate, and have conversed with his patients. Many of them had benefited by his treatment, and some had been cured. This gentleman has also written a very able work upon his system; but he admits of the application of no other electricity than that obtained from the wheel.

Other professors again have chosen the continued current from the pile, while others adopt the single current of the electro-magnets, and some the magneto-electric, the reverse of the former, as the only rational mode of practice. Thus it happens, that there is no canon or law to guide the student in the study of electric science, unless he follows the advice of Dr. Bover Dodd, of America, the author of a treatise on Psychology, and Animal Magnetism, who says that the only safe system to be adopted is the electric, or one composed of the best portions of all other systems. This is the course which I have followed myself.

As every kind of elctricity has a peculiar action, and each possesses a distinct physiological virtue, it becomes necessary to apply them accordingly to the nature and character of the disease which we have to treat, and the various effects which we desire to produce.

This agent, however, which is the active principle of all the vital phenomena of nature, and whose immense powers are incalcuable, may be converted into a dangerous weapon if not properly applied. It would, therefore, be most desirable that electricity should be included as a *sine quâ non* in the programme of medical studies; and, better still, if it were introduced into hospital practice. To effect this we require a public school where students could be instructed in the principles of the science and in its practical application.

There are many in the profession who, though they have not studied the subject themselves, are aware that electricity does afford the greatest resources as a therapeutic agent, and would be desirous to apply it as such, if they only knew how. As it is, they are in the position of a person in whose hands you place promiscuously a variety of remedies, telling him that he possesses therein the cure for many diseases, to go therefore and heal the sick.

It may be said, however, that electricity has been employed successfully by many who were not acquainted with its therapeutic properties or physiological action. This may be so, and it is to a certain extent true of all empiricism; though we must not forget the larger proportion of patients who suffer from misapplication and maltreatment at the hands of the unskilled and ignorant.

Of these many have passed under my own treatment, and they ask me why has electricity failed with them? Electricity is produced by natural laws, and is the same in the hands of every one. It is not the agent itself, therefore, which fails, but the mode in which it is applied.

What is that mode, and what knowledge is requisite for its correct administration?

This knowledge is clearly two-fold; first of all, he must be able to diagnose the pathological condition of the organ which is diseased, and be conversant with anatomy, sphlachnology, and physiology. Secondly, he must have made himself familiar with the characteristics, the properties, and *modus operandi* of the two species of electricity, and have acquired a practical knowledge of their various modes of application, for these constitute, so to speak, the materia medica of the electrician. The effects of electricity are so manifold that it may be said to be an armoury in itself against every disease, and, in a word, a universal panacea. It is an incomprehensible power, but, like the sun, we cannot comprehend it. It is the vivifying principle of the universe, but we know both only by their effects. If it would not occupy too much space, I would, with pleasure, give, as an illustration, the record of a series of cases successfully treated by electricity, the various methods which I have adopted for its application, and the implements also requisite for its application. These are—the copper bath, with various conductors for local applications; an electric machine, with all its appendages; electro-magnets, single and double currents; electrodes appropriated to the various organs, such as the eyes, ears, mouth, and all other parts of the organism; which, with other appliances, form an arsenal thoroughly furnished to meet every kind of foe in the shape of disease.

Perhaps Mr. Sandham will pardon me if I take the liberty of observing that he himself omitted to describe the manner in which he applied the electric current in the interesting cases which he gives. I beg, also, to differ with his opinion with regard to the nature of the hemiplegia which he treated. I should certainly classify it as a case of *paralysis*, as paralysis signifies the loss of action or motion, whatever may be the cause which has produced it. The causes may, indeed, be various, and present diverse phenomena. It is essential, of course, to discover what those causes are, as the cure depends entirely upon their removal.

J. F. Caplin, M.D., F.A.S.L.

MEDICAL ACT'S AMENDMENT BILL.

TO THE EDITOR OF THE MEDICAL PRESS AND CIRCULAR.

Sir,—In reading over the proposed Medical Act's Amendment Bill, one cannot help thinking that it is still very inefficient for the thorough and legal protection of the rights, privileges, and interests of the members and students of the medical profession.

In the first place, Clause XVI. of the new act is still very ambiguous. It appears from reading it that any person may practice medicine and surgery still, providing he assume not the title of physician, surgeon, &c.; at least, I fancy the law would try to make it so in case of prosecution under this said Clause.

Secondly, Should Clause XVI., though after all, prove in reality so thoroughly effectual, that all persons practising medicine and surgery, not registered, can be prosecuted and convicted, what is to be done with articled pupils and assistants engaged in the treatment of diseases for the interest of their principals and students, on account of the hospital or dispensary to which they may be attached; also in the cases of midwives, qualified or not, rendering assistance in child-bed to the poor who cannot fee a duly qualified medical man? I repeat, what is to be done in any of the above cases? for should Clause XVI. prove all that can be desired, then assistant, student, and widwife will all be open to prosecution alike. Surely a special clause must be added for their protection.

Thirdly, It is scarcely fair to British (by British I mean English, Scotch, Irish, and Colonial) qualified medical men, that foreign graduates in medicine should be entered on the Medical Register, and allowed to practice in any part of the British empire, and to enjoy equal rights and privileges with the British practitioner without first being examined by a Board of examiners appointed by Government, and then, if passed, such foreign graduates to agree to practise medicine and surgery, subject to certain bye-laws—say those as the Royal College of Physicians of London require their licentiates to observe.

I do not think the above hard or interfering with the liberty of the subject, as it is a fact on the Continent that Englishmen before practising there must obtain not only permission of the Government to do so, but in some cases they must also possess the M.D. of certain Continental Universities. In conclusion, let me observe—using an old adage—"that what is worth doing at all is worth doing well." So it becomes the duty of those to whose lot the framing of the Medical Act has fallen to make it as stringent and as efficacious as possible for the thorough suppression of quackery, and the illegitimate practice of medicine and surgery in all its branches. It is high time that the public should be able to distinguish and know the difference between the qualified and unqualified practitioner; or rather that a certain portion of the public should not have it in their power to consult the knave in the garb of the honest man. Let an act be obtained that can bring the quack and impostor speedily to account and conviction, and the public will be quite as thankful for it and reap as many benefits as the members of the medical profession themselves.

Henry W. Williams, L.R.C.P.Edin.

Quarantine on arrivals from Ireland with clean bills of health has been abolished at Malta.

The Board of Guardians of the Ennistymon Union, Co. Clare, have increased the salaries of their medical officers, Drs. Shannon, Coleman, and Ryan, from £80 to £100 per annum; and the Poor-law Commissioners have sanctioned the increase.

MEDICAL GLEANINGS.

(From the British and Foreign Medico-Chirurgical Review.)

ON THE INJURIOUS EFFECTS OF DRESSINGS AFTER AMPUTATIONS.

Dr. Burow brought this subject before the profession in 1849, with the object of showing that much of the mortality that follows operations is really due to the employment of dressings. He adduced the slight mortality that had attended his own cases in which these were abstained from as compared with that exhibited by Pauli's statistics. He is now enabled to refer to an additional number of his own cases, making ninety-four altogether, in which the mortality has proved quite trivial. And yet these include numerous cases of amputation of the thigh, leg, arm, &c., many of the patients upon whom the operation was performed being very poor, and treated under disadvantageous sanitary conditions. The stumps in all, however, were left freely exposed to the air, unincumbered with dressings.

As to the execution of the operations, Dr. Burow, when possible, always prefers the tourniquet to manual compression, and performs flap operations whenever the condition of the soft parts admit of this. He disapproves of shaving off the periosteum before dividing the bone, and is very particular in tying every bleeding vessel, believing it far better to tie some of these superfluously than to have the stump disturbed by subsequent bleeding. The surface of the stump is to be left quite exposed until a serous exudation begins to issue, which is generally the case within half an hour, although in some cases we may have to wait some hours for this. The flaps are then brought together by means of two or three sutures and three or four strips of adhesive plaster, these last sufficing without the sutures in amputation of the arm. After the patient has been placed in bed the stump is only covered with a piece of linen to protect it from the flies, and in the case only of there being much pain ice is resorted to. The very great swelling which takes place in the stump during the second and third days is evidence of the mischievous effects which must result from its confinement by dressings. By Dr. Burow's plan nature is left unimpeded in her process of restoration of collateral circulation of the divided vessels, and emboli with pyæmia are far less likely to occur. If the swelling of the edge of the stump be very great, the threads may be divided at their points of insertion and left to be discharged, the adhesive plasters being renewed when they become loosened. The discharges are to be gently pressed out from the deeper portions of the wound, and the greatest attention must be paid to cleanliness. How much less reaction follows this simple procedure is seen by the rapidity of the recoveries, patients who had undergone amputation of the thigh having repeatedly left their beds on the eleventh day, the stump being guarded by a small pledget kept on by adhesive plaster. For some years past Dr. Burow has been in the habit of applying to wounds attended with abnormal discharges the acetate of aluminum lotion, which is a cheap and excellent preparation for hospital practice, removing all bad smell. So after amputation, when the discharge is considerable he resorts to it.—*Deutsche Klinik.*

ON CATARRHAL INFLAMMATION OF THE CAVITY OF THE TYMPANUM OCCURRING IN YOUNG PERSONS.

Dr. Roosa in this communication refers to one of the forms of catarrhal inflammation of the tympanum which proves very amenable to treatment. It may come on without any positive exciting cause, more or less impairment of hearing gradually taking place, with little or no pain.

"Objectively, the following symptoms are observed:—The pharynx is found in a state of inflammation; little elevations, like granulations, are seen on its surface, and the secretion is in excess. The tonsils may or may not be hypertrophied. The membrana tympani, instead of having its normal 'neutral grey' colour, is of a pinkish hue, with an exceedingly brilliant appearance. The vessels are not generally to be distinctly traced on any part of it. The triangular light spot is either entirely absent or is smaller than normal, indicating that the position of the drum is changed.

"The observance of hygienic rules, the exhibition of various therapeutical agents, and due attention to the condition of the mucous membrane of the pharynx, will in time bring relief in these cases, but the impairment of hearing is a symptom which long remains troublesome. We have, however, the means at our hands, in Politzer's method of rendering the Eustachian tube pervious, of instantly improving the hearing, thus removing the most embarrassing symptom, while we go on with the proper general treatment, curing the disease on which this symptom depends. It may be supposed that the impairment of hearing in these cases is due to a plugging up of the faucial orifice and the calibre of the tube by mucus, which is suddenly expelled by the column of air driven in. . . . It is confidently asserted that the use of Politzer's method in the treatment of this class of patients will render the progress of the case highly satisfactory, which under the old method could hardly be said to be the case. After the first use of the instrument the improvement which occurs will probably only last a day or two, but I have never known the hearing to have become worse, and the repeated (say three times a week) practising of the method will render the improvement permanent. It is only an adjuvant, a fact carefully to be kept in mind; and the necessary general treatment should never be lost sight of. I was led to the attachment of a bulb or inhaler containing tincture of iodine to the simple apparatus of Politzer, from the need felt of introducing some substance into the cavity of the tympanum which should promote absorption in the mucous membrane of the tube and middle ear. This want is supplied by the introduction of the iodized air; and my experience serves to show that the combination produces a more powerful and permanent effect than is produced by the use of simple air."—*American Journal of Medical Science.*

ON REDUCING DISLOCATIONS BY MEANS OF CAOUTCHOUC.

M. Anger observes that, having for some time employed this substance in the treatment of anchylosis, fractures, spontaneous dislocations, &c., the good results derived from it induced him to extend its application to traumatic dislocations. A man was brought to the clinic with dislocation of the shoulder, which the ordinary procedures failed to reduce. The trunk being secured, extension was applied by means of a tube of caoutchouc, the thickness of the little finger and sixty centimètres in length. Gently employed at first, the traction was gradually increased until the tube had been wound four times around the bed-post, thus making four traction cords of fifteen centimètres each. The extension was kept up for nearly half an hour, the patient by that time feeling quite exhausted; and the muscles which had resisted the reduction having become relaxed this was easily accomplished. This mode of making the extension by its gradual and gentle, though efficient, character, M. Anger considers as very superior to any of the ordinary procedures. The amount of traction employed must be proportioned to the resistance offered, which varies by reason of strength, sex, and age. In the present case, the subject of which was athletic and the dislocation complicated, four tubes, fifteen centimètres in length, extended to double their length, amply sufficed. The extension should be regulated in ordinary cases so as to obtain complete muscular relaxation in fifteen or twenty minutes.—*Gazette des Hopitaux.*

ON AMPUTATION OF THE HIP-JOINT.

Dr. Morton in this paper gives the histories of the eleven cases of this operation which have been performed at Philadelphia. Of these, seven recovered and four died. He terminates it with the following conclusions:—

"1. In cases of long standing disease, tumours involving the bone, soft parts, or both, necrosis following gun-shot wounds, reamputations, or where suppuration has existed for a long period, the constitution being more or less accustomed to the drain and irritation, a more favorable result after amputation may be expected than in those cases where the operation has been performed for recent injury, where it has almost invariably proved fatal.

"2. In regard to the choice of operation, the integumentary flap operation, with a circular division of the muscles close to the pelvis, may be considered a safer operation, and is preferred to all others by Professor Pancoast. By this there is not so much muscular tissue left to suppurate, and we have more reasonable hope for primary union to a considerable extent. In small shrivelled limbs, where there is hardly any tissue about the joint except skin, the flap operation is probably as good.

"3. The loss of blood during the operation being primarily the chief source of danger, we find the abdominal tourniquet absolutely required, and no operation at the joint should be undertaken without it. Having the control of the circulation throughout the extremities, we are able to guard against all loss of blood, which otherwise might tend to develope pyæmia, or even immediately to allow of a fatal collapse.

"4. The after treatment of the stump by the application of *pure laudanum* (the parts being constantly wet with it) was first used by Dr. Pancoast in 1860, and answered admirably. In his second case he was able to put the patient asleep at any time by increasing the quantity used, more than a gallon being used in his last case. This dressing was employed in the case which came under my care, and answered every indication."—*American Journal of Medical Science.*

ON SPRAINS IN CHILDREN.

M. Guersant recommends that cases of slight sprain should be treated either by binding wadding around the joint, or by methodical kneading or shampooing *(massage)*. This last may be resorted to either immediately or some hours after the accident, provided always that there be tumefaction and infiltration of the soft parts, a bandage moistened with a spirit lotion and a little extract of lead being afterwards applied. The hands having been greased with lard, gentle and prolonged pressure should be exerted on the limb from below upwards, the *séances* being repeated more or less often according to the severity of the sprain. In slight cases the patient is enabled to walk after one or two of these; but when the sprain is more severe, the shampooing may have to be repeated for several days. Where there is great swelling and severe pain leeches should be resorted to; or cold may be kept applied by means of wet compresses or continuous irrigation. At the end of a few days a bandage should be lightly applied, to be followed when the swelling has all subsided, by a starch bandage, which may be retained for a fortnight, month, or even longer.

M. Guersant especially alludes to the sprains produced in children by the mischievous practice of suddenly raising them by a single arm, the limb always being more or less twisted into a state of pronation or supination, with distension or stretching of the joints at the wrist and elbow taking place. It is very rare for fracture or dislocation to be produced in this way, but the appearances may be such as to cause alarm to the friends of the child, and sometimes even to the medical attendants. In ordinary cases, there is no appreciable deformity present, but the movements of the parts give great suffering to the child, and on the execution of these a sound is sometimes heard, without seeming to proceed from any precise spot, such as might be produced by the sliding of articular surfaces on each other. Quite suddenly, after the execution of some of these movements, the child ceases to complain; and without our seeming to have done anything to remedy the defect, he becomes enabled to move the arm as before the accident. Sometimes, however, the pain persists, and there may be great tenderness around some one of the articulations. It is not always possible to make a correct diagnosis in these cases; but when neither fracture or dislocation can be detected, a sprain may be said to have been produced—*i.e.*, a sliding of the articular surfaces with distension of the ligaments; or, in other words, a tendency to a dislocation which has not been effected. The accident is not always confined to the wrist or elbow, and may implicate more than one joint. The arm should be kept at right angles, either in supination or pronation according to the preference of the patient. The child then complains no more, and in three or four days is cured. If at the end of this time pain persists, a starch bandage may be applied for eight or ten days.—*Bulletin de Thérapeutique.*

THE ST. PANCRAS WORKHOUSE.

At the weekly meeting of the St. Pancras Board of Guardians, Dr. Markham, Medical Poor-law Inspector, attended in consequence of a communication which had been made to the Poor-law Board on the subject of small-pox cases in the wards of St. Pancras Workhouse. He had just examined those wards, and he scarcely ever saw wards in a more unsatisfactory state, more calculated to spread the disease. He understood there had been not less than sixteen cases in the house since the 9th of November last, and he found that, with regard to clothing, not only had no steps been taken for its disinfection, but they were tucked under the beds of the patients, and allowed to remain there till the patient recovered. They were then given them to put on. He found that the sheets and blankets were not changed, and the nurse had informed him that very often patients were put under the sheets and blankets that had just been used by other patients, and that she had to get the sheets and blankets as best she could. The same remark applied in cases where persons had died. The things they had used were used again without being disinfected. He had ascertained that there was only one nurse in the wards during the day, and during the night only one old woman, who was 71 years of age. There was only one night-stool for each ward, and if more than one patient required it at once they had to go across a stone yard. He could not help saying that this state of things was most dangerous, and he could not tell to what extent the disease had been propagated in the wards by it. That day there were thirty-seven cases in the wards. He thought it would be better for the Board to take immediate steps to remedy this state of things than to wait for any direct application and investigation by the Poor-law Board. The chairman, Mr. Watson, and other members of the Board called Dr. Markham's attention to the fact that by deputation and otherwise they had frequently urged upon the Poor-law Board the necessity of providing hospital accommodation for small-pox cases. Dr. Markham said he had understood that was the case, and he had no doubt they gave all the accommodation in their power. What he complained of was the system which allowed the wards to run into the condition in which he had found them. Mr. North said if he was ever surprised at anything in his life, it was at the statement with respect to their sheets and blankets, for they were articles of which there was a superabundance at the disposal of each ward. He was equally astonished at the statement that the clothes were allowed to remain under the beds. It was only another instance of the shocking weakness of the present management of their workhouse. Other members of the Board expressed their surprise at the statements that had been made, of which they had no previous experience. Dr. Markham said if gentlemen doubted his word they should accompany him to the wards and he would show them that what he had stated was correct. A resolution was then passed to at once appoint more nurses and refer the whole matter to the House Committee to remedy the evils complained of by Dr. Markham.

Parliamentary Intelligence.

HOUSE OF COMMONS.—Feb. 12th.

SCURVY IN THE MERCHANT SERVICE.

Mr. Tracy asked the President of the Board of Trade if his attention had been called to the circumstance that on the 9th inst. eleven seamen were hoisted helplessly on board the *Dreadnought* Hospital Ship in a state of utter prostration, from the easily preventable disease of scurvy, whilst others had been received the same day suffering in a less degree from the same malady. And whether steps had been taken to ascertain the number of British seamen suffering in a greater or less degree from scurvy at the home ports, who had taken refuge in sailors' homes, and in lodging-houses apart from the seamen's hospitals; also at the colonial and consular ports, and in the Indian and Pacific ports.

Sir S. Northcote said the attention of the Board of Trade had been directed to the case of these men, and he might mention that it had been the practice of the Board of Trade for some time past to direct the shipping masters at the different ports to report to them the cases of seamen landed ill of scurvy. They had no special information as to the number of those sailors who became inmates of refuges or sailors' homes and lodging-houses. In many places inquiries had taken place, and the result of several of them had been laid before Parliament during last Session, and some further papers on this subject which were being prepared with reference to more recent inquiries would shortly be laid before Parliament. With regard to colonial and consular ports, they had not the same means of obtaining information, but there had been a great deal of correspondence with the Indian Government upon the subject, and

papers with reference to it would be laid before Parliament, and the Government hoped before long to introduce provisions to meet these melancholy cases, and apply a stronger control over the causes which led to the prevalence of scurvy.

Medical News.

Apothecaries' Hall.—The following are the names of the gentlemen who passed their examination in the science and practice of medicine, and received certificates to practise, on Thursday, February 7, 1867 :—

Hebert William Fagge (Guy's Hospital), Hythe, Kent.

On Thursday, February 14 :—

William Davies (University College), Llanpumsaint, Carmarthen, Charles Henry Fernivall, Westminster Hospital; John Latham Rushton (Manchester Medical School), Macclesfield; Richard Careless Sanders (London Hospital), Moulton Vicarage, Northamptonshire; Frederick William Fowke (Guy's Hospital), Byfield, Northamptonshire.

As Assistants :—

William Jones, Whitehouse, Lyth-hill, near Shrewsbury; Alfred Henry Buckett, 5, Liverpool-street, E.C.

The following gentlemen also on the 7th of February passed their first examination :—

Charles Lewis, Guy's Hospital.

On the 14th of February :—

Charles Howard Orfeur, King's College Hospital; Walter Williams Godfrey Stables, St. Bartholomew's Hospital; George Andrews and Charles Higgens, Guy's Hospital.

Army Medical Department.—The Director-General of the Army Medical Department presents his compliments to the editor of The Medical Press and Circular, and begs to enclose a list of the candidates of her Majesty's British Service who were successful at the competitive examination in August last, and who have passed through a course at the Army Medical School, showing the combined results of the examination :—

16th February, 1867.

Names.	Studied at	No. of Marks.
Collins, W. ...	... Cork, ...	... 4980.
Harman, W. M. ...	... Dublin, ...	... 4753.
Fernandes, A. S. ...	... Edinburgh, ...	... 4508.
Moore, S. ...	... Dublin, ...	... 4410.
Gibson, G. J. ...	... Cork, ...	... 4315.
Nugent, H. ...	... Dublin, ...	... 3963.
Williamson, J. ...	... Aberdeen, ...	... 3892.
Steele, W. H. ...	... Dublin, ...	... 3758.
Archdall, T. G. ...	... Dublin, ...	... 3637.
Major, N. B. ...	... London, ...	... 3585.
Ratigan, A. H. ...	... Dublin, ...	... 3550.
Richards, C. T. ...	... Dublin, ...	... 3475.
Clifton, G. H. ...	... London, ...	... 3376.
Cornish, H. ...	... Edinburgh, ...	... 3363.
Fitzmaurice, J. ...	... Dublin, ...	... 3155.
Armstrong, C. ...	... Dublin, ...	... 3137.
O'Neill, C. J. ...	... Dublin, ...	... 3106.
Macartney, J. ...	... Galway, ...	... 3031.
Lougheed, W. ...	... Dublin, ...	... 2945.
Dunn, G. C. ...	... Edinburgh, ...	... 2840.
Gamble, S. B. ...	... Dublin, ...	... 2768.

The Hunterian Oration.—The Hunterian Oration was delivered to a crowded audience, at the College of Surgeons of England on Thursday afternoon, by Mr Hilton, F.R.S.

The forty-sixth annual meeting of the Seamen's Hospital Society was held on Wednesday week, at their offices, 86, King William-street, London, under the auspices of Sir William Bowles, K.C.B. From the report of Mr. Kemball Cook, it appeared that 1500 cases of scurvy were received into the *Dreadnought* during the last sixteen years.

Sir Laurence Palk, Bart., at the annual meeting of governors of the Torbay Infirmary and Dispensary, paid a compliment to the manner in which Dr. Powell, the house-surgeon, had performed the onerous duties of his office during the year:—"They had all heard (said the chairman) with pleasure the compliment paid to the doctor, and they were all perfectly aware that he merited that distinction. And he begged leave to tell the doctor that he thought, considering that he had been there comparatively so short a time, it was the highest compliment he had ever heard paid to a young medical man on his management of such an institution as that infirmary. He said that because he trusted that it would give him zeal and courage to persevere in the good work as he had hitherto done, and to show him that he would find friends and admirers who would always come to his assistance whenever their services might be contributed to his benefit."

Royal Institution, London.—Last week, during a lecture upon sound, at the Royal Institution, Professor Tyndall exhibited for the first time a clever experiment devised by Biot, the French philosopher. By means of a polariscope made of rhombs of Iceland spar, placed in front of the electric lamp, the light was so polarised that none of it fell upon the screen. He then fixed a strip of thick plate-glass, about three inches wide and six feet long, in a vice, and, by rubbing it with a wet cloth, made it give off a musical sound, because of the longitudinal vibrations set up. The vice bit the strip exactly in the centre, and there the strain and pressure of the musical vibrations were consequently greatest. But glass under strain or pressure, when introduced into the polarised ray, will let light pass through the polariscope. Consequently, when the ray was allowed to traverse this slip of glass near its centre, a broad disc of light appeared on the screen every time the glass set up a musical sound; but when the strip was at rest the calcareous crystals would allow no light to pass.

A Provost and Town-Council Fined.—On Monday week, John Whitelaw, Provost of Dumferline, was charged with, on the 27th and 28th of December last, unlawfully digging up 30 diseased animals, or the carcases thereof, from a park on the farm of Craigluscar, which carcases had been buried there in consequence of the animals having died of or been slaughtered while labouring under rinderpest in January, 1866. The provost pleaded "Guilty," in so far as he ordered the exhumation, but stated, in mitigation of penalty, that the ground in question had been acquired by the town in order to increase the storage of water for the inhabitants, and that it was after the purchase they discovered that the cattle had been interred in the place where they proposed to construct a reservoir. They had consulted Dr. Stevenson Macadam as to the best means of removing the carcases without risk or injury to the neighbourhood, and acting on his advice, and under his superintendence, they had lifted and reinterred the carcases at a very short distance off, the men employed being kept aloof for the day from all external contact, and their clothes and all the implements and apparatus used being thoroughly disinfected, while showers of water and carbolic acid were sprinkled on the carcases during removal. The town clerk appeared for the defender, and put in Dr. Macadam's report, stating that the careful arrangements therein prescribed had been strictly attended to. Sheriff Mackenzie said he considered that the proceedings taken in the removal of the carcases showed, not ignorance, but full knowledge of the order contravened. It was of great importance that the supply of water to Dunfermline should be sufficient, but the course for the Town Council was to apply to the Privy Council, or, failing them, to the Legislature, and not to take the law into their own hands. He was happy to think that no evil consequences had ensued, the operation having been carried through very successfully, but the law must be observed, especially by those who were in authority, who ought to show a good example of obedience to the community. He would impose the mitigated penalty of £30, being £1, for each carcase disinterred.

The London Sick Poor.—At a meeting of the Committee of the London Workhouse Infirmary Association (Earl Grosvenor, M.P., in the chair) on Monday, when there were present Lord Charles Bruce, M.P.; the Hon. Dudley Fortescue, M.P.; Mr. Julian Goldsmid, M.P.; Mr. Arthur Mills, M.P.; Mr. Briscoe, M.P.; Sir Walter James, Mr. Henry Goshen, Mr. J. C. Parkinson, Dr. Rogers, Dr. Austie, Dr. Carr, and many other gentlemen, Mr. Hardy's new Bill was considered. It was moved by Mr. Ernest Hart, and seconded by Lord Charles Bruce, M.P., and carried unanimously, that "This committee recognizes with great satisfaction that the Bill introduced by Mr. Hardy embodies literally the greater number of suggestions which they had laid before Mr. Villiers and Mr. Hardy for the better management of the workhouse infirmaries, and of the better treatment of the sick. They regret that he has not been able to place a larger number of the sick upon the common fund, with a view to relieve to a greater extent the poorer parishes, and they entertain doubts as to the successful working of the proposition for adding a proportion of unpaid nominees to the Guardian

Boards." On the proposition of Dr. Austie, seconded by Mr. Briscoe, M.P.; Earl Grosvenor M.P.; Lord C. Bruce, M.P.; the Hon. Dudley Fortescue, M.P.; Mr. Davenport Bromley, M.P.; Mr. Julian Goldsmid, M.P.; Mr. Oliphant, M.P.; Rev. Mr. MacGill. Dr. Carr, Mr. J. C. Parkinson, and the honorary officers were nominated a sub-committee to examine the clauses of the Bill, and report to the association before the second reading.

Wood Naphtha.—The principal of the Inland Revenue Laboratory, reporting on the fraudulent use of wood naphtha in the preparation of beverages under various names, says:—"Methylated spirit was, I believe, first sold as a beverage under the name of 'Indian brandee,' a title which alone almost proves the real object of its sale. Next was introduced 'medicated whiskee,' 'pure Islay mountain,' and others, the names of which were more suggestive of the gin palace than of the druggist's shop. Their unequalled valuable properties were widely made known through a profuse circulation of handbills and by other means. Persons went about the country pressing small shopkeepers to become retailers of the spurious article, and I have no doubt that throughout the whole of these transactions there was a tacit understanding among all concerned that the liquids should be asked for and sold as a medicine, although meant to be consumed as an ordinary stimulant. The spurious compounds, under whatever name they were sold, had no definite composition, the only substance which was constantly present, and which, in combination with water, formed nearly the whole bulk, being methylated spirit, or a derivation from such spirit. The 'Indian brandee' was put forward as a specific for nearly every disease, and was said to be composed of the most costly and rare productions of India, which had by great skill been so combined and applied as to become a perfect boon to the human race. It is sad to reflect upon the unblushing audacity of such statements, made by persons who deem themselves honest, and who would resent the application to them of the word impostor, but it is far more so to think that there are large masses of the labouring classes in this country, who firmly believe them. As a corollary to the above, it may not be amiss to state that each of the samples sold as 'Indian brandee' analysed during the past year was composed of either one or other of the following groups of substances—First, Methylated spirit partially purified by treatment with nitric acid and distillation, containing a trace of sweet spirit of nitre, and sweetened with brown sugar. Second, Methylated spirit slightly flavoured with rhubarb, and sweetened with brown sugar, Third, Methylated spirit simply sweetened and coloured. Fourth, Methylated spirit containing a small quantity of chloroform, and coloured. Fifth, Methylated spirit with a small quantity of opium. Sixth, Methylated spirit, coloured, sweetened, and slightly flavoured with ginger. Seventh, Methylated spirit, flavoured with fenugreek, and coloured. Several samples of 'whiskee' were analysed, and, with the exception of not being coloured, found to be identical with the first group of ingredients given above. Two samples of 'Indian tincture' were also examined; one was composed of methylated spirit, containing a trace of sweet spirit of nitre, and much sweetened with treacle, the other was nothing more than methylated spirit similarly sweetened."

Notices to Correspondents.

Dr. Hearne, Southampton.—Owing to great pressure on our space we are unable to find room for the communication sent us. Shall be happy to give attention to the subject in our next if you can furnish us with early information.

M.D.—Proofs shall be sent you.

Dr. H. J. is thanked for his communication.

Dr. C.—The matter shall receive considertion.

ASPHYXIA FROM CARBONIC ACID.

TO THE EDITOR OF THE MEDICAL PRESS AND CIRCULAR.

Sir,—In reply to your questions appended to the article headed "Asphyxia from Carbonic Acid," in your number of the 13th inst., I beg to state—1. The parties referred to did not suffer from asphyxia symptoms; and, 2. The time was probably sufficient for the escape of the effluvia, being from about ten o'clock p.m. to seven o'clock next morning. The questions that press on me relative to the case are these—Are *turf-coals*, burned as described, capable of producing poisonous gases? If so, what are the gases so generated? If not trespassing too much on your much engaged time I will thank you to let me know, and if a private note is more convenient to you, it will answer me quite as well as any other means of replying.—Truly yours,

A Subscriber.

MEDICAL APPOINTMENTS.

Anderson, J. G. L.R.C.P.Edin., L.S.A., L.M., has been appointed Resident Obstetric Officer to St. Mary's Hospital, *vice* Thurgar, term of office expired.

Carter, Albert E., L.R.C.S.I., has been appointed Assistant-House-Surgeon to Northern Dispensary, Liverpool.

Hayden, J. Augustus, M.R.C.S.E., L.M., L.S.A., has been appointed Assistant-House-Surgeon to the St. Pancras Workhouse, *vice* Edward Mahoney, M.B., M.R.C.S.E., L.S.A., resigned.

Muriel, R., M.R.C.S.E., has been appointed a Surgeon in Ordinary to the Ely Dispensary.

Randall, John G., M.R.C.S.E.Eng., has been appointed House Surgeon at the Male Lock Hospital, Dean-street, Soho.

Sinclair, Dr. G. M., has been appointed a Surgeon in Ordinary to the Ely Dispensary.

Smith, Heywood, M.A., M.B.Oxon., M.R.C.P., has been appointed Physician-Accoucheur to the St George's and St. James's Dispensary (Mount-street branch).

Smith, R. Ayre, L.K.Q.C.P. (Exam.), L.R.C.S.Edin., has been appointed House Surgeon to the Sunderland Infirmary and Dispensary, *vice* Dr. Dixon resigned.

Sterling, H. H. J., M.R.C.S.E., has been appointed Resident Medical Officer to the Metropolitan Free Hospital, Devonshire-square.

MEDICAL DIARY OF THE WEEK.

Wednesday, Feb. 20.

Royal College of Surgeons of England.—4 p.m. Prof. Huxley, "On the Osteology and Dentition of the Sauropsida, or Reptiles and Birds.

Society for the Encouragement of Arts, Manufactures, and Commerce. 8 p.m.

Thursday, Feb. 21,

Royal Institution.—3 p.m. Professor Tyndall, "On Vibratory Motion, with Special Reference to Sound."

Harveian Society of London.—8 p.m. Mr. Victor de Méric, "On Some Complications of Gonorrhœa."—Mr. Teevan: "Cases to Demonstrate the Use of the Urethroscope."

Friday, Feb. 22.

Royal College of Surgeons of England.—4 p.m. Professor Huxley, "On the Osteology and Dentition of the Sauropsida, or Reptiles and Birds."

Royal Institution.—8 p.m. Mr. M. D. Conway, "On New England."

Saturday, Feb. 23.

Royal Institution.—3 p.m. Mr. G. A. Macfarren, "On Harmony."

Births, Marriages, and Deaths.

Announcements are inserted without charge, and must in all cases be authenticated with the signature of the sender.

BIRTHS.

Bowen.—On January 23, at Quebec, the wife of R. Bowen, Esq., Surgeon, Rifle Brigade, of a daughter.

Evans.—On February 11, at Cheshunt, Herts, the wife of Nicholl Evans, M.D., of a son.

Ewing.—On February 6, at Buttevant, the wife of Surgeon-Major Ewing, 62nd Regiment, of a son.

Davis.—On February 4, at Abbey-gardens, St. John's Wood, the wife of W. F. Davis, M.D., Assistant-Surgeon H.M.'s Madras Army, of a son.

Foster.—On February 9, at Fortune's Well, Portland, the wife of E. B. Foster, M.R.C.S., R.N., H.M.'s brig *Ferret*, of a son.

Griffith.—On February 9, the wife of Dr. S. C. Griffith, of 57, Wimpole-street, Cavendish-square, of a son.

Olive.—On January 31, at Northampton, the wife of E. H. Olive, M.R.C.S.E., of a son.

Protheroe.—On February 6, at Gosport, the wife of E. Shaw Protheroe, Esq., Surgeon-Major R.A., of a son.

MARRIAGES.

Chennell—Rolph.—On February 9, at St. Martin's-in-the-Fields, S. P. Chennell, M.D., to Jane Edwards Rolph, eldest daughter of the late R. Rolph, Esq., J.P., of Sandwich, Kent.

Grant—Duguid.—On January 31, at Westerton, Huntly, N.B., R. A. P. Grant, Assistant-Surgeon 43rd Light Infantry, to Jeanie, Frances, only daughter of the Rev. W. Duguid, D.D., Glass, Huntly.

Hughes—Edwards.—On February 7, at St. Hilary Church, Denbigh, J. R. Hughes, M.D., of Denbigh, to Margaret Eliza, eldest daughter of the Rev. R. Wynne Edwards, canon of St. Asaph and vicar of Rhuddlan.

Stevenson—Maberl.—On February 7, Thomas Stevenson, M.D., M.R.C.P., Angell-park, S., to Agnes, third daughter of George Maberly, Esq., London.

DEATHS.

Goldin.—At the Naval Hospital, Plymouth, W. G. Goldin. M.D., Surgeon R.N., late of H.M.'s Ship "Orlando," aged 46.

Elsdale.—On the 25th ult., R. Elsdale, M.R.C.S.E., of Moulton, Spalding, Lincolnshire.

Mayer.—On the 3rd inst., J. Mayer, M.D., M.R.C.S.E., of Macclesfield, formerly of Newcastle, Staffordshire, aged 53.

Hetley.—On the 4th inst., at Norbury Lodge, Norwood, Surrey, the Lady Charlotte Hetley, the wife of Frederic Hetley, M.D., and fifth daughter of the second Earl of Norbury and Baron Norwood.

Bruce.—On the 7th inst., W. Bruce, M.D., of Kensington-cresent formerly of Madras, aged 75.

Fisher.—On the 9th inst., Dr. A. L. Fisher, of York-place. Portman-square, aged 69.

Davies.—On the 11th inst., R. Davies, M.R.C.S.E., of Gray's-inn-road, formerly of Holborn-hill, aged 73.

Original Communications.

THE INFLUENCE OF THE DISCHARGES AND NERVOUS SHOCK ON THE COLLAPSE OF CHOLERA.*

By JOHN COCKLE, M.D.
PHYSICIAN TO THE ROYAL FREE HOSPITAL.

I AM anxious to bring before the Society, as succinctly as possible, some observations on the influence of the discharges and nervous shock on the collapse of cholera. I do so feeling that the proper discussion of the subject in a Society like the present is best calculated to develop what is theoretically valuable in Pathology—what really serviceable in treatment.

The disease, it is true, sleeps for the moment but, if we look to the history of former epidemics and watch the local rekindlings of the last, there is reason to fear that the cause may be still latent, possibly to awaken to its accustomed activity.

During the pause, therefore, we ought calmly to survey our past doings and if we have been found to cling so fondly to any "idols of the den" as to give our theories too much rein, we shall find wholesome restraint in the greater wisdom and moderation of those around, so that good must accrue both to the individual and to science at large.

Unity of opinion on a subject so intricate and one, still hot with debate, I am well aware, cannot be expected, nevertheless, a very cursory survey of the actual position of the pathology and therapeutics of cholera must convince us that a much wider divergence exists than is compatible with the safety of the community and the intelligence of the profession.

It would seem the veriest platitude formally to affirm that, if the theory were unsound the practice probably would be unsafe yet, viewed in its practical working the proposition cannot be overestimated, since life is the stake we play for.

A divergence of opinion then so manifest does not speak hopefully for our science. Indeed despite the hopes for years indulged, the old question as constantly asked and as variously answered since 1832 still presses on us under the additional light it is fancied that we have for a final reply.—Is cholera the result of a specific poison inhaled into the lung and passed into the blood, working mischief there, yet with a tendency to arrest by a salutary outpouring from the stomach and bowels? Such outpouring being thus secondary and, probably, conservative ; or, is this outpouring an essential part of the disease—equally the result of a poison but located in the gastro-intestinal tract and reflecting its violence over the system?—the outpouring, thus, being primary and certainly destructive.

Such is the dilemma to which I specially invite your attention.

Permit me, first, a brief allusion to one, not only of the most controverted but, of the most interesting points in the morbid anatomy of cholera from its bearing upon the progress of the disease viz. the condition of the great organs of circulation and respiration. It is allowed that in the various epidemics, both symptoms and *post-mortem* results somewhat widely differ. Still, after very extended and, I hope, impartial investigation of the subject, to my mind, the mass of evidence in favour of stasis in or, the transit of dark blood, through the lungs, is so overwhelming, that it must be considered as a more or less general fact in the algide stage of cholera. To doubt it, would be to impugn either the good faith or competence of the numerous observers. In earlier times, without any special theory to support, we may not, for one moment, challenge the one, and the simple evidence of educated sense is, surely, a sufficient guarantee for the existence of the other. The test of the balance has, in some cases, shown, as might be inferred, the congested lung to be heavier than normal. In a few instances, it is stated that the left ventricle was alone distended with black blood. I have, elsewhere, attempted to show that changes in the distribution of the blood may occur *after* death but, that these latter phenomena are not so explained, will be subsequently seen. On the other hand it must be confessed, however we explain the matter, that very many examinations have shown the blood to be arrested at the right heart, and the lungs and left heart, left, comparatively, bloodless. This condition has been particularly adverted to by authorities at home and abroad. At home, by Dr. Parkes whose researches are so often and so deservedly quoted. In his summary, the only point we miss in this portion of morbid anatomy, is the condition of the coronary arteries ; such condition must have a significance for, if arrest of blood occurred at the right heart, these vessels would bear to the cardiac structure blood, deficient in quantity, if black blood passed, defective in quality ; on either alternative, the normal balance of the heart would be disturbed. Furthermore, the state of these vessels might furnish a key to that congestion of the coronary veins Dr. Parkes so frequently observed and, which, else, would stand out as a bare fact, recorded, but unexplained. If little or no blood entered the left heart, the explanation of such distension of the vein would not always appear upon the surface of the matter, seeing that the blood of the turgid right auricle could not force the coronary valve. If, on the other hand, impure blood of given quantity entered the nutrient arteries of the heart, we might account for the distension of the veins and the dark ecchymoses often surrounding them by the *stasis* induced by such blood in the cardiac capillaries, and veins. Simple *plenum* of the right auricle would not prevent the ingress of the coronary venous blood, since its walls are often flaccid. Apart from this, however, none of the results described are peculiar to cholera, they equally occur in algide fever, yellow fever, serpent and other poisons and, probably, in other diseases also. So that, in epidemics of cholera, if we look at all that *post-mortem* examinations unfold—appearances sometimes slight, sometimes variable, at other times, opposed, and, often, common to other diseases—we must concede that mere morbid anatomy fails to satisfy our wants as to a pathology of cholera.

To proceed to our more immediate subject. The first point for consideration is as to the existing amount of evidence for the presence, in the blood, of some specific poison. I commence with one of the weakest points that could be urged on any ground of opposition to such view, indeed, I state the facts here rather for the purpose of obtaining your opinion than for that of wielding them against the hypothesis in question. I refer to the bursting out of the disease in the midst of perfect health, and will simply take two illustrations from Indian experience. In one case, an officer had been out tiger hunting in the morning and returned to quarters in the highest health and spirits ; during breakfast, he was suddenly seized with watery vomiting and purging, and the disease was, almost immediately, confirmed. In the second case, another officer in the very plenitude of health and spirits, went, after breakfast, to bathe with his companions ; while in the water, serous vomiting and purging instantaneously set in and collapse speedily followed. Do either of these cases find, in your minds, satisfactory explanation on any theory of a poison in the blood? can you imagine a disorder so produced attaining its meridian of violence suddenly in the midst of vigorous health and elastic spirits or, a discharge to be critical without our having the slightest insight into the necessity for a crisis ; and surely to avoid an inconsequence, if we affirm "critical discharge" we ought to have some knowledge of the state related to this predicate, otherwise we oppose a positive term to the vaguest possible correlative. Besides, what could a critical discharge superadd to perfect health? At least, whatever doubts you may entertain, are not the symptoms quite as reconcileable on the supposition of some change originating in the gastro-intestinal tract and called into action by the stimulus of

* Read before the Medical Society of London, Feb. 11, 1867.

the food in the one case and by the sudden revulsion, in the other, on the mucous membrane?

Next, if cholera poison can, by inhalation, pass into the blood, it ought equally to be capable of exhalation and, thus, of reproduction. A large experience opposes itself to this hypothesis—practitioners, nurses, friends are constantly breathing the very breath of the sufferer, examining the fresh discharges—and when does a clear case of propagation thus occur? That attendants, occasionally, are attacked by cholera is very true, but, comparatively, so rarely, that when an epidemic influence is present we may as fairly assume such attack to be, possibly, a simple coincidence.

I am far from denying the contagiousness of cholera under certain conditions, doubting, only, whether it be through the medium of *recent* excreta.

The blood of cholera patients has, in many cases, been passed into the circulation of healthy persons, from accidental wounds or intentional innoculation, and, never, with any untoward result. The blood, in larger quantities, has been injected into the veins of animals without producing true cholera; ill results have unquestionably followed, but these have been nearly conclusively shewn to be the result of blood *sepsis*, and not choleraic.

Infants, again, have often been suckled by mothers, suffering under confirmed cholera but, in no instance that I am aware of, has the disease been communicated to the child thus exclusively nourished, prior to the actual invasion. A secretion so prone to be influenced by matters in the blood, and to influence the offspring seems, here, to bear no poisoned taint. It must not, however, be forgotten that cholera is rare in infants at the breast, but this fact does not at all explain the immunity, if the blood circulate so subtle a poison as that of cholera.

The recent excretions, just separated from the blood, and which ought, equally, to be most infectious, have been repeatedly tasted and even drunk by man, and injected into the veins, stomach, and bowels of animals, without sensible influence over the health. In fact, the former series of experiments have been repeated so many times upon the human subject without injury, that I attach very little importance to experiments on animals where results are said to have been produced. The researches of Pettenkofer and the latest experiments in Paris, tending strongly to support them, show that the *recent* excreta are innocuous when introduced into the system; some short time must elapse until decomposition furnishes the *materies morbi*.

If we further look at a certain proportion of cases in which sudden relapse occurs, 14 or 16 days after apparent convalesence and nearly always resulting either from error in point of quantity or, quality of food or, the operation of cold and damp we cannot reconcile, with our present knowledge, such relapse with the notion of a poison in the blood. To suppose that such an active agent could, thus, rest dormant, would amount to a virtual denial of its leading attribute, and seems at variance with any theory of elimination.

The researches of Dr. Beale, showing alteration of the intestinal villi, apparently of some duration, do not support the theory of an eliminative poison of the blood nearly as much as that of some agent acting from the intestinal tract.

Next, with regard to the theory of elimination. The term, though in current use, is not at all times very strictly defined as to its extent of application. We, surely, ought severely to distinguish between simple and critical elimination; they clearly mean very different things. With reference to the pathology of cholera especially is it more than ever necessary to define our terms. We know that certain remedial agents may exhibit special affinities for certain organs; thus, juniper may tend to the kidneys, squills to the mucous membrane of the lungs, elaterium to the stomach and bowels, mercury to the salivary glands and so forth. These agents may, though the fact is not proved, eliminate themselves through these several tracts with the secretion they increase, and, even carry with them injurious matters from the blood; though the latter result would, probably, in a logical sense, be an accident of their action. Few such agents have any special power to select and carry off an actual poison from the blood; they eliminate, and, in the current, sweep away morbid matters. The agent employed is obedient to certain laws. From a multiplied experience we anticipate the effect and can control it often at our will. Should the agents act with undue violence, they require restraint. But we should hardly venture to apply the term *critical* to such discharges. A critical elimination bears the impress of something like intelligent design on the part of Nature, and, on her part alone. We can rarely predicate either the time, manner, or even site of its occurrence—now, by hæmorrhage —now, by abscess—at one time, by a sweat, at another time, by a diarrhœa, sedimentary discharge from the kidneys, or, by long and restorative sleep. Whichever of the selected modes, they all possess in common the characteristic of affording speedy and direct relief to the maladies in which they occur, and this generally happens during the stage of reaction. This is precisely what we should expect from the extrusion of a poison which had vitiated the composition of the blood and aroused a reactive energy of the system and should hesitate to apply the term *critical* where no corresponding relief occurred. This is the rule. But, even in cases where Nature oversteps her mark and such discharges exceed the limits of relief, no sound practitioner ever hesitates in an attempt to moderate their violence.

In *confirmed* cholera, all is reversed. Gastro-intestinal discharge is the constant, overt, *initial* phenomenon; it occurs under depression, and progresses and culminates under exhaustion and collapse. Even assuming, for a moment, cholera to result from a poison in the blood, if we question ourselves, how little do we know of such agents! Absolutely nothing as to their essence, and but little more as to their proximate action. We are only cognisant of the wreck they occasion.

But, if we were, provisionally, to assume that a volatile matter entered the blood in some definite quantity or, to form with some element therein, a definite concrete (the hypothetical cholera-cathartine) the nature of the disease would be intelligible enough, we might reasonably infer that such a compound from its drastic essence, might eliminate itself and bring its own cure or, be restrained by treatment.

So conceived, a theory of simple elimination would be rational and in harmony with what we know of drastics acting by absorption, and, in the category of these, it might be included.

But, if the poison be regarded as zymotic, fermenting the total mass of blood then, I apprehend, such an action would furnish the best argument for our assuming that cholera poison contributes to a fatal issue by drain of nearly all the available serum of the body, and, *a fortiori* a sufficient reason for regarding the discharge as non-critical and for checking it if we possessed the power.

In an avowed ignorance, then, of the exact operation of this blood poison, it is open to all to speculate and guess, for guessers are somewhat like archers, now and then, an outsider gets a gold centre. I would make one trial which you will accept *quantum valeat*. If we are to assume that cholera really be an inhaled poison, and to believe, as I fancy we must, that it is not directly infectious, I would ask whether some volatile element inhaled, might not form with another element of the blood a definite concrete—a dangerously depressant emeto-cathartic, which thus acts only *as a poison to the individual*. When the excretions are passed, after two or three days, decomposition occurs the volatile agent is again set free, and either held in solution, or volatilizes and passes away to react upon some other predisposed organism.

Such, is the doctrine of a poison in the blood, and, of the contingent effort for its removal by discharges from the stomach and bowels; a doctrine most seductive, and possibly, sound, though, to some minds, wanting in the full evidence to make it binding on belief. We may, therefore, very properly seek to obtain either a reversal of the sequence or, at least, a suspension of opinion, should equal

or better evidence be adduced in favour of a different view.

We might submit that the internal or external drain and co-etaneous shock upon the nervous system is the essential —is the actual disease without which, it would not be cholera; and, that true algide phenomena do not occur either before or, without, the drain or, whatever else, we term that matter either fluid, or semi-solid which fills the stomach and bowels, consisting of the spoiled elements of the blood. In nearly every language cholera implies a kind of colic, flux, or draining from the bowels with rapid loss of power. This is the one great result which remains permanent under all the varying conditions that post-mortem examination reveals.

The history of the various epidemics clearly shows that the disease may be ushered in by *prodromata* or, that these may be entirely wanting.

Where such exist, as, for example, lassitude, vertigo, singing in the ears, disturbed vision, pallor, syncopal tendency, anorexia, thoracic, or abdominal uneasiness; they are quite explicable on the supposition of some local disturbance of the gastro-intestinal tract—irradications from the great epigastric centre and intestinal plexuses; indeed, several or nearly all of these symptoms attend, to some extent, the commonest disturbance of this tract, so that no necessity need exist to push back this semeiology to prior changes in the blood. We must not forget one first great law of philosophy "*entia non multiplicanda sunt, præter necessitatem.*"

In other cases, diarrhœa, variable in duration at first, without compromise of the general health, and nowise distinguishable from a common looseness save by its endowment, potentially, to spread the disease, precedes and, in an immense majority of cases, gradually or suddenly merges into confirmed cholera. On this point, the opinions of the most experienced men, of all countries, are almost unanimous. If this diarrhœa is checked which is generally practicable in the earliest stage, health is, at once, re-established. This unquestionable result again, strongly pleads in favour of the local origin of the flux, and stands in striking antithesis to the doctrine of a poison in the blood requiring elimination by such an outlet, and which being hemmed in, ought, *ex hypothesi*, to be followed by alarming internal disorder, since Nature never permits us to arrest a truly critical discharge with impunity.

When the disease suddenly explodes as confirmed cholera, as it does at times, and in the midst of seeming health, the site again is local, whatever the cause may be. A double change almost simultaneously occurs—shock upon the nervous ganglia (in some very rare cases so intense, as rapidly to arrest the higher functions of respiration and circulation, and kill before more marked phenomena are *seen*;) and sudden rush of serum of the blood through the walls of the stomach and bowels;—a rush, at times, so enormous that as Moreau de Jonnès describes "it seems, at times, greater than the entire mass of fluids in the body" or, to quote another great author, Cruveilhier, "this enormous abstraction of the serum of the blood of the cholera patient in a few hours, nay even in a few instants, explains the symptoms of the malady much better than any alterations of structure."

This sudden and immense drain of blood elements nay, in those rapidly fatal cases just referred to, simply fill, to distention, the stomach and bowels, without outward issue, thus resembling internal hæmorrhage though hidden from sight, still, lost to the circulation, revealing itself to our sense by palpation and percussion, the features expressing the loss the circulation has sustained.

Here, you will pardon me a short digression with reference to the subject of transudation through the bowels. It has been of late, too much the fashion, if not to ignore, at least, to under-estimate this influence in the causation of collapse. According to my experience, a graver oversight could not occur in the pathology of cholera.

Those pathologists, of course, who look upon collapse under the light of another causation, and regard such condition either as resulting from the special action of a poison on given vessels or, from the shock communicated to the nervous centres from an inflamed condition of the bowels, would regard the discharges as of subordinate importance. With every respect for those who hold such views, and held, possibly, on a securer tenure than my own, I still must say that, to disregard the influence of discharge appears to me, a backward step, in every sense, in the pathology of cholera. Such is its significance that I think it fair to call your attention to some facts connected with the influence of intestinal discharge upon the circulation in its least complicating shape, we may, then perhaps, better estimate its influence on cholera.

Many have read the narrative of Morgagni. This great physician, once travelling post, to visit a patient, was seized with sudden looseness of the bowels and passed, successively, in twelve hours, sixteen pints of serous fluid. In this brief interval, he had become so emaciated as if he had suffered from some long and wasting malady, and his weakness was extreme for several days.

Cruveilhier states, that when at Limoges in 1818, during a very hot summer, he was called to a woman 40 years of age whose features were so profoundly changed, her face so sunken and discoloured, that he supposed the case one of abdominal disease in the last stage. Have you been ill long? "No!" was the reply in a hoarse voice. "This morning I left my house on business in perfect health. On my return, I was seized with a looseness and passed, rapidly, an enormous quantity of water." So that in a few instants this woman was perfectly prostrate.

The same Physician, again, states. "I was sent for at Paris in March 1849 to a young girl from Auvergne who retired to rest in her usual health, and whom I found dying at 7 A.M. Upon entering her small chamber, I saw the floor inundated with water. It was cholera discharge passed, involuntarily, during the night and which had soaked through the mattress. She died, a few moments, after my arrival." To avoid being tedious, I will only cite one more example, quoted by Trousseau and Pidoux, from Barbier's work on Materia Medica, and which he personally observed—A woman, in one of the faubourgs of Amiens, took a purging medicine from a herbalist, it caused such excessive discharges by vomiting and purging, that rapid exhaustion ensued. Being conveyed to the Hotel Dieu, the following morning, the tip of the nose, the ears, and cheeks were of a very dark violet colour as, also, the hands and feet. Gangrene rapidly followed, and she lost one of her feet, and some phalanges of the toes of the other.

Now, we must remember, with one exception, these were the results of simple drain in healthy constitutions, and had they lasted, would not the truest algide collapse speedily have followed? They closely resembled, in their effect upon the system, those of cholera, stopping short of collapse. The occurrence of gangrene has been several times observed in cholera, and doubtless from the same cause.

(To be continued.)

REMARKS

ON

AFRICAN, WEST INDIAN, AND OTHER FEVERS AND DISEASES.

By ALEXANDER LANE, M.D., Surgeon Royal Navy.

HAVING served for a considerable period on the West Coast of Africa, and in the West Indies, as well as in the East Indies, Southern Pacific, Mediterranean, and other parts of the world, I had a very good opportunity of seeing and treating this disease, known on the coast of Africa as the Bullam, and in the West Indies and other parts as *yellow fever*. My first acquaintance with both—if they are not both one and the same disease, which I think I will satisfactorily prove, was on board H.M. Ship Iphigenia, in 1822.

We arrived on the West Coast of Africa in the latter end of January, in the cool season of the year—if any portion of the year can be called cold, or cool, upon that Torrid Continent, adn we left it on the 26th of June following,

when we sailed for the West Indies, which we also left on the 5th of September following for England, via Sandy Hook, New York. When the Americans found that we had the "yellow fever" on board, they put us into the strictest quarantine, though the weather was stormy and cold; they anchored a vessel near us, from our Consul, laden with live stock, fruit and vegetables; the crew left the vessel, and we had to haul her alongside, take our supply on board, and anchor her again at a distance; such was the dread of this disease amongst the Americans, but it only went to show how very inconsistent man is in almost every relation of life, for whilst they were so very particular with us, they had no land quarantine between New York and New Orleans and other places, when the yellow fever existed. We had lain four days in the Rio Gambia, and six in the Rio Noonis, before we went down to Sierra Leone, where we arrived of the 17th of February; the months of March and April were pretty healthy, although we had twenty-three cases of diarrhœa from eating too much fruit. We had a solitary case of "fever" in March; we had visited all the usual stations down the coast, had fought a desparate boat action in the river Bonny, had been to St. Thomas' on the equator, and returned to Sierra Leone, before this disease made its appearance, which was about the middle of May; and from this period until we had arrived in the cold northern regions it could not be said that we were free from the malady. From the coast of Africa we went direct to the West Indies, and remained twelve days at Port Royal, Jamaica, from whence we went to the Havana, where we remained one and twenty days; we had ninety-two cases on the coast of Africa, and one hundred and thirteen at the Havana. I had thus an opportunity of examining carefully and minutely into the nature and origin of this disease on both stations, and of remarking any difference or peculiarity, if such existed. In all cases which came under my observation the attack was precisely the same; each question had to be particular and pointed, and a direct answer required from each patient; at first there was an uncomfortable feeling, and nausea with restlessness, this was generally speaking of short duration, it was quickly followed by rigors or cold chills; the shaking and shivering in those paroxysms were very violent, and so great was the sensation of cold and the chattering of the teeth that no coverings whatever could produce any degree of warmth until the paroxysm had subsided; then succeeded a violent reaction. The first symptom was the quick pulse, then headache and heat of skin, thirst, dry tongue, suffusion of eyes, pain all over, and loins particularly, general languor and listlessness. Sometimes the intense heat of skin (when you placed your hand upon it) would produce over your whole system a pricking sensation, as if you had been stung by nettles, and so lasting and so disagreeable that eau de cologne could not remove it. I have felt it for two hours. Those were the most prominent symptoms on both stations, and this is the state in which you find a patient labouring under what is called "Bullam, or Yellow Fever." The symptoms may be very violent, the headache intense, the thirst urgent, but *those symptoms are symptoms only;* they had a cause, and that cause produced them, and they are clubbed together and called "Fever." They are supposed to form this so-called disease; thus, when a physician is called in, he endeavours to remove the symptoms without considering the cause which brought them into existence, and keeps them in activity until either the virus looses its power over the constitution or the accidental administration of some medicines to neutralize the poison. Otherwise death must ensue. If the patient gets worse the symptoms increase in violence, accompanied with vomiting, abdominal pain on pressure, high-coloured urine, furred tongue, flagging pulse, and a tendency to delirium; skin becomes clammy, with sometimes a yellowish tinge of body, of the eyes particularly, hiccough and vomiting of a dark fluid, petechiæ or purple spots, then death finishes the scene.

I once had a patient in this latter state, and had given the case up as hopeless, when a sudden thought struck me to venture an experiment. I sent for a bottle of pale brandy, and I succeeded in pouring down his throat two tumblersfull in its undiluted state. The poor man said something, but I could not make out what he said; however, down fell his head, the vomiting ceased, and he fell asleep, from which he did not awake for 25 hours. Nothing could awake him, but the pulse was present, though very small and weak, but not wiry, rather soft and compressible. The skin felt more natural when he awoke. I was standing by his hammock at the time, and his first words were, "I'm very hungry," though they were very feebly enunciated. I gave him some preserved soup, warmed with a little wine, which he seemed to relish much. He then fell asleep again, and slowly recovered under a generous stimulating diet.

One morning I bled an athletic Irishman largely—say thirty-six ounces. I tied up his arm, and laid him down on deck until his hammock was ready. In the meantime, whilst I was bleeding others, the bandage slipped off his arm, and he bled so profusely that we had difficulty in restoring him. Next morning he was convalescent. This accident led the surgeon to believe that bleeding repeatedly, *ad deliquum*, would be the best mode, and adopted it accordingly; but, in each instance, it did not produce the desired effect, and therefore it was given up. The nausea or vomiting and abdominal pain arrested my attention. Were they merely symptoms of the disease called fever, or did they point to a more dangerous action going on within the abdomen? Several opportunities were offered me at Sierra Leone, and I gladly seized them, notwithstanding the heat and rapid decomposition, nor did I care much for the supposed contagion. I wanted to see the result of the "fever," and judge for myself. I therefore had several post-mortem examinations, which threw much light on the subject, and *showed me in what manner the disease proved fatal.*

In all those cases I found no disease in the lungs or heart. The abdominal viscera—that is to say, the intestinal tube and its peritoneal connections were the only parts which showed the result of action—inflammatory action—in some cases most violent and extensive, glueing them, as it were, together in a mass, inseparable unless by violence. In one case there was slight cerebral congestion; but, as far as these cases went to show, they proved that this disease called "fever" was nothing more or less than inflammation of the bowels, the result of a specific poison. As to the cause, I could only refer it to some powerful atmospheric poison, a poison *sui generis*—a poison which could strike down and kill the most healthy man. A specific poison, absorbed through the lungs and thrown directly into the circulation, directs its baneful attack upon these parts of the human system at once: this is called "Bullam," or "Yellow Fever." When the liver or any other organ becomes implicated, then it becomes complicated, yet all go under the same name though marked sufficiently.

This, then, is the plain matter of fact, freed from all clap-trap and nonsense, and medical jargon besides. All those symptoms are symptoms only—symptoms indicating injurious action in the arterial system, increasing in violence as their violence indicate, directed to some portion, if not the whole, of the alimentary canal, and of a very peculiar character. It must, therefore, be evident that those symptoms are not a disease in themselves, but merely point out to the physician the work of destruction which is going on.

The power or influence of mercury in certain inflammatory diseases is too well known to require any additional support; therefore, I thought that if the system could be speedily placed under its influence by large doses of calomel and camphorated mercurial ointment the disease would be overcome, or, in other words, that mercury was a specific against this poison. This has been proved a fact, as we did not lose a patient whose system could be, or could have been, placed under its influence; but it was not every patient whose system we could mercurialize: hence the failures. My own life was saved and my brothers lost, upon this very principle. Observing that the mercurial

system could not be depended upon in all cases, I began to think that there might be some other medicines which would act more specifically upon this poison, which would neutralize it in the blood, and cause, perhaps, less constitutional derangement.

I could not imagine that a symptom was a disease ; for instance, a quick pulse, a hot skin, or a headache; what they are not singly, they cannot be combined. Fever in itself is merely heat of skin ; in any disease when there is no heat of skin present there is no fever. Thus, then, when the heat of skin is above the natural standard fever is present, and the different symptoms which present themselves beside this, give it its particular name. When the symptoms are mild, it is called slow, or simple continued fever ; when they become worse, it is called active inflammatory fever ; when they become more violent it is called typhus, or typhoid, or yellow, for a symptom with some will make a difference in name and treatment. A circumstance occurred which caused me some reflection. It was supposed that as soon as we got into cold weather the disease would at once disappear ; in place of that, in the month of October, on our voyage from Sandy Hook to England, we had several new cases ; but although they all had the usual symptoms, they were much less violent, and yielded easily to mercurial treatment. On strictly questioning these men, I found out that they had all been unwell the day we left the Havana, and had been loitering about hardly able to do any work, and that they would have applied earlier, only they knew that their "rum" would be stopped. This was quite satisfactory, and confirmed me in the belief that *there will be no such disease where the means of its production do not exist, and that it is not personally communicable.*

On our arrival at Spithead we communicated with the shore, and no evil results followed, though the next day we had to remove to the quarantine ground. In four days after, we were at Chatham, where, in less than an hour, the ship was so completely filled with people that you could hardly make your way through them, yet none of the visitors suffered from their coming on board and getting into close contact with those labouring under the disease, though they were all in a state of convalescence. Moreover, I am certain that the first night we had on board three women for every man in the ship, which converted the lower deck, for a time, into a perfect pandemonium.

Now, in this case, we had had this disease on board in its most malignant form ; we lost eighteen officers and men; came home with a number of sick and convalescent on board ; get the very stronghold of the malady—the lower deck—filled promiscuously with people, many of whom remained on board and slept below, and yet no evil consequences follow. I should think that this was pretty strong presumptive proof that the malady was neither infectious or contagious, and that it requires the presence of the original poison to produce the disease. The next place I met with this disease was in the Mediterranean, in H.M. brig *Sparrowhawk*, in 1824 and 1825. Fifty-eight cases came under my observation. I had, besides, the good fortune to see several post-mortem examinations (at Naples) of those who had died from fever, and although I did not see any of them during their illness, on close examination I could detect, and without the aid of a microscope, the result of inflammatory action in various portions of the intestinal tube ; there was great emaciation in all, and therefore the blood must have been very poor, and the action of the heart was not sufficient to drive the blood with such force as in a stout plethoric Englishman, consequently the results were less conspicuous, yet sufficiently so as a proof of its existence. The mode of treatment I could not ascertain ; however, the mouth presented no appearance of their having been placed under the influence of mercury.

In all those cases which came under my own immediate observation I could see no material difference, between them and those of Africa and the West Indies, except that in some cases the symptoms were not so very violent, depending, I persume, on the virulence of the poison—these were rigors, heat of skin, quickness of pulse, thirst, headache, &c. ; yet, generally speaking, the disease appeared in a milder form, and was more easily subdued, because I think that, though the symptoms were evidently of the same description, there was some peculiarity in the nature of the poison ; the cold paroxysm was not so violent, and although there was some disposition to the yellow effusion, it was much less prominent, which I attributed to the fact that, none of them assumed a dangerous or fatal character—the most severe was in the person of an officer, and the yellow tinge in the eye was quite perceptible. This case was designated as "bilious remittent fever," and I fancy there was, or had been, an absorption of bilious fluid.

In 1827, 1828, and 1829, I was in the West Indies, and during all that period I only lost one patient from this complaint, but, it was complicated with other diseases, and delay in making early application, so that there was little or no fair play for either doctor or patient.

In 1830 I was on the West Coast of Africa, and had again some post-mortem examinations which all tended to one result. Here I lost one patient from causes similar to the former. Where there is a combination of disease and a dissimilarity in treatment, the chances against hope are far too numerous, and, generally speaking, such events must naturally be expected. In 1831 I was in the West Indies, where I remained until April 1834, during which time three hundred and ninety cases came under my observation. Out of this number only one died, who had, besides, diseased liver and lungs. Some of those cases I was obliged to send to hospital, because I had not sufficient room on board, and I had no assistant ; therefore, the labour became too much for me, but, on the return of the convalescents, there was not one who had not been placed under the influence of mercury, and I had to place all on the convalescent list from ptyalism. This is only an additional proof that mercury is an antidote against this poison in all cases where the system can be placed under its influence.

In 1839, I was in the East Indies and the Southern Pacific. Eighty-seven cases without loss came under my observation, differing in no essential from those of Africa or the West Indies ; there were the rigors, quick pulse, hot skin, headache, thirst, &c., &c. I could not observe any difference, and I not only believed them to be *one and the same disease, but treated them as such*, and the result proved that I was not wrong in my prognostication. However, I did not place my sole reliance upon mercury ; there were other medicines which I thought would neutralize the poison as well, and I had occasion to observe that, where the mercury did not act, the patient had as good, if not a better, recovery under their influence than when it acted. There was no fœtor of breath, loosening of teeth, &c. This latter treatment was more successful than the mercurial, and the patient much sooner and with greater certainty placed under its influence, and also with much less detriment to the constitution generally. There is a vast amount of importance in early application, as the case becomes almost hopeless if medicine cannot affect the system ; those fatal symptoms soon set in which get the name of typhoid, it being impossible to arrest the effects of the poison.

With regard to the yellowness of the skin, it must arise from one or both of these causes—an absorption of bile, or some peculiarity in the poison ; but I feel disposed to attribute it to the former, though chemical analysis, I believe, seems to doubt it. I now felt satisfied that all those diseases called "fever" arose from a similar poison, and were only to be found where the means for its production were in abundance, and which *would be found in Northern Europe if a tropical heat could remain sufficiently long to produce it*, but that which is produced, its "Prototype," is much milder in character, though not the less fatal, because, I fancy the mode of treatment is not sufficiently active ; it is sometimes slow in its development, is very insideous in its progress, and throws the physician off his guard. The virus of smallpox (and this disease, as well as many others, is accompanied by fever or heat of skin) will produce no other dis-

case; and *this is the case with every disease, each possessing its own peculiar virus, or poison*, and "virus" everything must be, which is prejudicial to the natural health of the body; and where do they exist if they do not exist in some peculiarity of the atmosphere? They must have generating causes, unknown to us, the blood is first poisoned, and the heart being stimulated by its unusual presence increases its action and drives it through the whole system rapidly. This disease called "fever" is subdivided into "stages," according either to its duration or peculiar appearance; all those symptoms will.

(To be continued.)

A CASE OF CHOLERA TREATED BY SALINE ALCOHOLIC INJECTION INTO THE VEINS; WITH OBSERVATIONS.

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EXTREME COLLAPSE; INJECTION; IMPROVEMENT; RELAPSE; REINJECTION; PREMATURE LABOUR; PYÆMIA; RECOVERY.*

K. S., a well-nourished, strumous-looking girl of seventeen, pregnant rather more than seven months, was admitted into the London Hospital early in the morning of October 3rd, 1866. She had gone to bed quite well, and was seized at two A.M. with purging and vomiting of a rice-water-like fluid. She had had no premonitory diarrhœa.

The report when admitted was:—"Aspect choleraic; eyes sunken; lips livid; pulse scarcely perceptible; she vomits almost constantly, and has copious frequent rice-water stools; cries out piteously with cramps in her legs and belly; complains of thirst; drinks unlimited quantities of cold fluids, and immediately rejects them."

At one P.M. Worse; quite pulseless. It was therefore decided to inject saline alcoholic fluid into the veins, the more so as the purging and vomiting have been very profuse all the morning.

At two P.M.—that is, twelve hours after the commencement of the attack, the operation was performed. At that time the patient was pulseless and voiceless, her respiration forty-five a minute, the temperature in the axilla 93°; the lividity was extreme, and the cramps very severe.

Seventy ounces of the usual alcoholic saline fluid were introduced by gravity into the circulation. Some difficulty was experienced in the operation. The median basilic was opened at the bend of the elbow in the usual way, and the fluid at first flowed very well, but after some few ounces had entered the flow became very slow. As the case required the injection of a large quantity of fluid, the corresponding vein on the opposite side was opened, and the operation continued there. Still the fluid ran in but slowly. There was great immediate benefit; the pulse returned at 100 of fair strength; the respirations fell to forty a minute; voice and red colour of the lips returned; the cramps ceased to trouble her, and she expressed herself as much better. Half an hour after the injection she had a slight rigor; the temperature in the axilla rose to 96, and profuse perspiration came on. The cramps in the limbs had altogether ceased, but she still complained of pains in the belly (probably labour pains).

During the next four hours she got again weaker, and at six P.M. was apparently in articulo mortis; her respiration 60 *in a minute;* pulseless; temperature in the axilla 94. She seemed to suffer much from cramps in the stomach, but her voice and consciousness were gone. The attempt was now made to introduce some more fluid into the circulation, but unsuccessfully in both arms. Recourse was then had to the saphena vein—at first near the knee, afterwards at the ancle; and 120 ounces of fluid were introduced in three quarters of an hour with immediate and lasting benefit. The pulse returned with moderate force at 110, and the breathing had fallen to 42 a minute by the time the injection was finished. The voice and colour became natural. She had no rigor after the operation, nor any more vomiting; no cramps in the limbs. Her temperature rose to 96 in the axilla; she took beef-tea, and brandy and egg-mixture, and retained it. As the labour pains continued, she was placed under the influence of chloroform, which was continued nearly the whole night. The next day the patient was much better in every respect; she was able to take nourishment; there was no reactionary fever. For further notes of this case I am indebted to Dr. W. B. Woodman. On the 6th, that is three days after the attack of cholera and the injection, premature delivery took place; the pains were most severe. The child was a seven months fœtus, and was born dead. Three days later an eruption appeared on the injected arms, not at first about the wounds, but mostly on the hands, gradually spreading up the forearm. It much resembled choleraic roseola in colour, but was nowhere discrete. After ten days the eruption was like erysipelas, getting dusky, having a tendency to vesication, accompanied with superficial œdema. The whole of both arms and part of the chest were involved in this condition, which was associated with rigors, and was followed almost immediately by pyæmic deposits in both elbow and the right shoulder joints, pulmonary engorgement, and typhoid symptoms. She continued in an extremely low condition for three months, with profuse discharge from numerous abscesses; great dyspnœa and fever. She took chop, eggs, wine, and brandy in large quantities; but every two or three weeks was again prostrated by rigors, in rapid succession. In the middle of January she became convalescent; the abscesses were everywhere healed up, but the movements of the affected joints somewhat impaired.

This case, the last under my care, is also the most remarkable, as the attack of cholera was exceedingly severe and was complicated with pregnancy, premature labour, and pyæmia. The difficulty attending the operation shows that the patient was *in extremis*, that blood clotting had already taken place in some of the largest veins, the respiration being at the rate of 60 a minute, a frequency unprecedented in my experience, and a proof of the severity of the case. The fluid as it would not enter the veins of the arm was introduced by those of the leg. In two earlier cases on attempting the injection into the arm only a few ounces entered, and distended the superficial veins of the limb without passing on to the heart. In these cases after death, the axillary and the larger veins near the heart were found occluded with clots, which prevented any fluid passing. It is reasonable to presume that a similar condition, though perhaps in a less decree, existed in this case, and retarded the first operation. When the second operation was attempted, the superficial veins of the arms were found to be entirely plugged, partly from the stagnation which had taken place previous to the first operation, and partly from the veins having been opened and the arm subsequently bound up to prevent bleeding, the patient being much restored after the operation. In this way we can account for the fact that the injection succeeded in the veins of the leg, when unsuccessful in those of the arm. Another cause of the earlier clotting in the arms may be their more incessant exposure to cold than the legs.

In cases where, with the force of gravity alone, the injection is slow or impossible, fluid might be forced in with a syringe, but probably with injurious, or, at any rate, without corresponding beneficial effects. It is preferable to attempt the operation at a vein in the leg, rather than inject fluid by means of great force into the veins of the arm. The use of gravity as a power offers so many advantages, by securing an easily-regulated continuous flow of fluid at a uniform rate and temperature, leaving the operator free to attend to the symptoms of the patient.

Few cases of such intense collapse as the preceding recover, and no case, to my knowledge, is on record, complicated with premature parturition, which has recovered under any of the usual modes of treatment. A third complication, also likely to have proved fatal, was pyæmia. The symptoms of this disease commenced a fortnight after

* Mentioned as Case 20 in the table published in this journal, page 590, Vol. ii., 1866.

the injection. At this time the wounds at the right knee and left ankle were healed; those at the elbows, which were much larger and where the tissues had been much pulled about and disturbed, were not healed, but appeared healthy, and there was no swelling or sign of inflammation in the arms. The rash then made its appearance, accompanied with fever, and followed by rigors, and then by the pyæmic deposits in the joints. From the great difficulty of breathing and the expectoration present during the pyæmic stage, it is possible that similar deposits existed in the lungs. Still the case resembled more one of pure pyæmia than one of direct infection from the suppuration of clots in the veins. If such a breaking down of clots took place, then the state of the veins before the operation is quite sufficient cause to account for it, and the clots cannot be ascribed to the operation. Pyæmia did not occur in any case of cholera treated by injection by Dr. Little in 1832 or 1848, nor in any other of my cases. Nor was it observed in any of the cases of venous injection for other diseases or for experiment recorded in the full report just concluded in this journal. At the time this patient was attacked with pyæmia, I had a number of operation cases in the hospital, and none suffered from this disease, nor was it then present in the wards. Parturition taking place during or consequent on an attack of acute disease, such as cholera, severe scarlet fever, or typhus, nearly always proves fatal to the patient, and probably the power of repair then in the system is so small in amount that, where death does not take place, some local death and degeneration in the uterine tissues does take place, and becomes a cause of purulent infection.

It is very probable that parturition, occurring coincidently with such an enfeebled state of the system, was the cause of the pyæmia in this case.

Recovery under such circumstances proves that the introduction of a large quantity of fluid into the circulation—in this instance, of nearly ten pints—after rousing the patient from collapse, does not lessen his power of repair, nor leave him in a worse condition for the success of the future efforts of nature. In fact, when the introduction of the fluid produces the usual revival of the patient, the fluid remains only a short time in the circulation, and is quickly removed, chiefly by the bowels, the stomach, and the skin. The very revival gives power for the excretion of the injection, hence the necessity for repeating the operation. One man, who nearly six months ago received a gallon and a half of fluid into his veins, tells me that, in consequence, he has had better health than ever before in his life. Although we cannot draw the conclusion this poor man does, it is clear that he is none the worse for the treatment he underwent. In conclusion, all experience demonstrates the necessity for *repeated* injections, and this fact I beg to impress on any one adopting the treatment of cholera by the introduction of fluids into the veins.

CLINICAL LECTURES
DELIVERED IN
STEEVENS' HOSPITAL,
TOGETHER WITH
OBSERVATIONS ON PRACTICAL MEDICINE.

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REMARKS ON CHLOROSIS AND HÆMORRHAGE.

(Continued from page 164.)

Chlorosis and anæmia, as we have said, predispose to effusions into serous cavities. This may take place in the cavities of the brain. A boy five years of age had been reduced to a state of anæmia by long-continued, wasting fever, and was anasarcous in the lower extremities. Whilst in this state, though apparently improving in general health, he became gradually, and at length profoundly, comatose. It was ascertained too, on examination, that there was complete hemiplegia of the left side. He was treated by blisters and mercurial inunction; gradually the coma and paralysis disappeared; as these symptoms subsided so likewise did the anasarca of the lower extremities; and the child, though still pallid and delicate, is now daily improving in health and strength, and exhibits no remaining sign of cerebral disease or dropsical effusion.

Miss B., eighteen years of age, having for several weeks manifested all the essential symptoms of genuine chlorosis, was seized with pain, neither severe nor of long continuation, in the left side, over the cardiac region. She soon became so breathless and weak that I was hastily summoned to see her. I found her scarcely able to breathe, pulseless, and to an extreme degree restless and agitated. The heart was displaced, its hurried and irregular impulses being perceptible only on the right of the median line; and the whole of the left side of the thorax was perfectly dull on percussion and destitute of respiratory murmur. The respiration of the right lung was loudly puerile. Copious vesications were rapidly produced by the free and extended application of acetum lyttæ; after which blisters were laid on the skin; sinapisms were placed on the feet and calves of the legs; and carbonate of ammonia with spirit of nitrous æther given internally. By these means some mitigation of the urgently suffocative symptoms was speedily effected. It had been my determination, had the patient not been quickly relieved, to have had the operation of paracentesis at once performed. Two hours, however, had not elapsed before a marked abatement of the suffocation rendered such a step, at the moment, unnecessary. Mercury was then rubbed in largely, and also given internally; digitalis in infusion was likewise taken. The combined action of mercury and digitalis was most remarkable and gratifying; after an interval of some hours the kidneys began to secrete, and so abundant was the diuresis, that the rapidity of the absorption was only equalled by the suddenness of the serous deposition. By degrees the expansion of the compressed lung became more and more evident, in the restoration and extension of the respiratory murmur, and the gradual replacement of the heart, affording decisive evidence of the favourable progress of absorption. At the end of the third day from my first visit, the heart had nearly returned to its normal position; and the lung, throughout the greater part of the left side of the thorax, had audibly resumed its function. The restoration to health was ultimately complete. In this case it was the sudden change in the condition of the organs—the rapid compression of the lung and displacement of the heart—which gave rise to the suffocative sensations and the imminent danger. Had these changes occurred more slowly, the system would have been gradually accommodated to them, and the immediate danger would have been less pressing. Cases of this kind may arise in which nothing but an early recourse to paracentesis can save the patient's life. This young lady exhibited every sign of constitutional struma.

It may be well here to observe that mercury in this disease must be administered with extreme circumspection. I remember having seen, several years ago, in consultation, a young lady about eighteen years of age, who had been for months previously in the chlorotic state, and who had become universally anasarcous. She was deadly pale and cold, no artificial appliances availed to maintain warmth in the extremities; the pulse was rapid and very feeble; there was, however, no discoverable evidence of organic lesion. She had been treated before I saw her with calomel in full doses, the result of which was sloughing of the gums and a large sloughing perforation of one cheek. She fell a victim to mercury administered with too unsparing a hand to one long labouring under chlorosis.

I have seen several cases of pleuritic effusion after long-continued fever, where the blood was reduced, apparently at least, to the abnormal state characteristic of chlorosis. I say apparently, because, not having had an opportunity of examining the blood after a long fever, or after profuse

hæmorrhage, I cannot venture to affirm their absolute identity. The similarity, at least, between the two states, is very striking.

I shall give briefly the following case, as an example of the form of pleuritic effusion I have met with in several instances after a tedious fever. A young college student, convalescent after a protracted fever, was observed to alter in his looks, not to improve as he had done, and to breathe more quickly. Not having seen him for several days, I was requested to visit him. I found him in a semi-erect position, inclined towards the left side; he had not experienced any painful sensation, but he felt more languid and weak than he had done for many days since the subsidence of the fever, and both his breathing and pulse were exceedingly rapid. He enjoyed little sleep, and that little was disturbed and uneasy. On examining the chest it was found to be dull on percussion over the left side, throughout its whole extent, and the respiratory murmur was inaudible. The heart was displaced: its impulse being inaudible, with visible motion of the integuments, three inches to the right of the median line. The left side of the thorax to the eye appeared much dilated, though but a small difference was detected by direct measurement; and the slightest exertion increased excessively the already existing dyspnœa. The effusion was, I presume, in this case, serous; it yielded gradually to mercurial inunction, and frequently repeated blisters. Other cases of effusion into either side of the thorax after fever, and several such after severe influenza, have fallen under my observation. In all these cases, long continued febrile action had reduced the frame and impoverished the blood; and it is exactly under such circumstances that a slight inflammation of the pleura is followed by copious serous exudation. These are cases in which, at a certain stage or period of the effusion, the tincture of the muriate of iron may be given with manifest advantage. Profuse, long-continued, and often-repeated uterine hæmorrhage also favours serous effusions. Albuminuria likewise produces pallor, attenuated blood, and tendency to serous effusion. In fact, any disease which deprives the blood of its due proportion of red corpuscles, may induce a state of anæmia, and predispose to effusions of serum.

Malignant diseases and tumours, either with or without hæmorrhage, also produce a perfectly anæmic state, and give rise to anasarca. The condition of the blood in some (particularly the hæmorrhagic) cases of anæmia, appears to resemble, perhaps to be identical with, that of the blood in the advanced stages of certain fevers, which, towards their close, are characterised by passive hæmorrhages; the blood being so thinned and broken down as to ooze, often copiously, from mucous surfaces. No symptom in the advanced stage of fever can be much more fatal than this.

It occasionally happens that, when the patient is reduced to a state of extreme anæmia, not only does a serous effusion take place, but also a tubercular deposition.

Master C., æt 11, an ardent, energetic child; rather precocious in mental manifestations and feeling, and abounding in animal spirits; of florid complexion, plump, and well nourished; had been, previously to my first visit, treated for strumous tumefaction of the cervical glands. I found him vomiting violently: the vomiting, though mitigated by treatment, continued in a distressing and exhausting degree for three days; it then abruptly ceased, and he appeared better. On the following day he was deeply and universally jaundiced, with some fever, thirst, and epigastric tenderness, but was able to retain in the stomach light farinaceous nutriment. The inflammation had obviously departed from the gastric, and had invaded the duodenal mucous membrane, and thus obstructing the orifice of the biliary duct, had caused jaundice. He continued in this state for many days; the yellow tinge then slowly and gradually vanished. During the whole of this period very little nourishment had been received into the system. He was now, however, apparently convalescent, though greatly reduced in flesh, strength, and animal spirits. After the lapse of a few days, a slight rigor ushered in fever; and this was soon followed by an outbreak of erythema nodosum on both lower extremities. The patches were prominent, hot, painful, red, and irregularly circumscribed; they were of various dimensions, some being equal in size to a half-crown piece; and for three weeks they continued to appear in successive crops, some fading away, whilst fresh ones were coming out. Whilst the eruption lasted there was present, though varying in degree, diurnal fever of the remittent type. When convalescence was nearly re-established, the little patient, now very bloodless, pallid, and emaciated, began to complain of slight pains, not persistent below the inferior margin of the left ribs. These, at first, attracted but little attention; at length the pain became more fixed and permanent, higher up under the ribs on the left side, and much augmented by a deep inspiration; an effusion commencing below gradually extended itself upwards, till at length the dulness on percussion was universal, and the extinction of respiratory murmur complete. The heart was slightly displaced, and the thoracic dilatation sufficient to obliterate the muscular movements, and the depressions of the intercostal spaces. After a long period of dyspnœa, often amounting to orthopnœa, accompanied with harrassing dry cough, sleeplessness, agitation, and general distress—painful even to witness—the chest fell in and became palpably contracted. Over a considerable space of the superior portion of the left lung, both anteriorly and posteriorly, respiration was re-established. The respiratory murmur, when first heard, was mingled with a small crepitus; by degrees the signs, local and constitutional, of tubercular disease, chiefly of the left lung, became more unequivocal, until no doubt could be entertained of the nature of the disease which brought this little boy to an early tomb. Prolonged wasting fever, and imperfect nutrition, rendered him exsanguineous; in this state he was attacked by pleuritis with effusion; nor was this all: coeval with the serous effusion was the deposition of tubercular matter in the parenchyma of the lungs. This disastrous event, masked at first by the effusion, but rendered subsequently manifest on the absorption of the effused fluid, stamped upon a case, otherwise not hopeless, an inevitably fatal character. Frequently during the progress of his illness, and on previous occasions, I had carefully examined the chest; and in no instance had I met with a more perfect example of sound lungs; of total exemption from any one sign, either local or constitutional, of preexisting crude or latent tubercle; so that no doubt was left upon my mind that the pleuritic effusion and the tubercular deposition were contemporaneous. I have seen and carefully observed many such cases, some of true chlorosis, others of superinduced anæmia, marked by the combined events of effusion into the sac of the pleura, and of tubercular deposition in the substance of the lung. In cases of this description I have known the operation of paracentesis proposed, and in one instance performed, when a careful analysis of the case would have rendered it certain, that the only possible result must be the infliction of a needless wound, with perchance a few days' prolongation of a miserable and suffering existence. On the subject of pleuritic effusions, some with, and others without tubercules in the lungs, I shall have occasion hereafter more fully to speak. I have not long since met with two cases of the double event alluded to, in young married women reduced to a state of extreme anæmia and debility by superabundant and too long continued lactation; they both terminated fatally, evincing before death indubitable signs of tubercular cavities; the local signs being most evidently marked on that side of the chest which had been the seat of pleuritic effusion.

In the foregoing remarks I have classed together cases of chlorosis and of anæmia. Between these two states there is a striking analogy; they both lead to the same pathological results; still, as I have before observed, they are not proved to be identical. Hæmorrhage, by no means unusual in anæmia, is not frequent in chlorosis. In cases of anæmia, serous and sanguineous effusions may and sometimes do occur simultaneously; whilst anasarca is present, if the patient be attacked with congestion or inflammation of the brain, lungs, or any other organ, an effusion of blood,

either circumscribed or diffused, may take place. A frequent cause of anæmia is hæmorrhage; but the hæmorrhagic action often continues, though the patient be already anasarcous and reduced to an extreme state of anæmia. Thus we occasionally meet with anæmia, hæmorrhage, and anasarca coexistent.

In chlorosis cutaneous eruptions are comparatively rare; in this respect the contrast with the hæmorrhagic diathesis is not a little remarkable. Upon the intimate connexion which exists between many varieties of skin disease and the hæmorrhagic condition, I shall hereafter have occasion, at some length, to dwell. There are on record, and I have, myself, met with, many instances of the alternation of cutaneous diseases, particularly of the eczematous kind, with hæmoptysis. In these cases, so surely as the exuding disease of the skin is either cured by art or spontaneously subsides, as certainly does the hæmoptysis return. In the hæmorrhagic condition, the superficial capillary system is often loaded with blood rich in red corpuscles, and various cutaneous eruptions are frequent; in the chlorotic state, this system receives comparatively few red corpuscles, and the skin is generally exempt from irritation and disease. To this general rule the exceptions are not numerous. In the treatment of many diseases of the skin this is a distinction of some practical importance; it frequently assists in pointing out the way which leads to the most effectual method of treatment. I have observed, in some cases, the outbreak of eruptions, particularly on the face, at that period when, the chlorosis having subsided, the opposite one of redness, flushing, and augmented mental and muscular vigour have been established.

Chlorosis has been traced to many sources; such as deep, long-continued mental emotions and sufferings; suppressed passions; sexual excesses and perversions; sudden cessation of the catamenia; profuse leucorrhœa; damp localities; impure air; transition from a rural to a city life; scanty and innutritious food; impressions of cold; sedentary occupations, and insufficient muscular exercise; copious and protracted hæmorrhage; and wasting and prolonged fevers. In short, its origin has been attributed to all causes capable of deteriorating the blood, depriving it of its due proportion of red corpuscles, and producing the state of anæmia. These, however, one and all, do but predispose to the disease; there are required in addition, a particular period of life and a particular condition of constitution, to produce it. Amongst the predisposing causes briefly enumerated, there is one which claims more particular notice; that to which I allude is the instinct of attachment, or as it is termed by the phrenologists, adhesiveness. Amongst the moral and educated portion of the female sex, I have noted many instances of the all prevailing influence of this powerful instinct. It is implanted in the female mind more deeply than in the male. Besides, the busy and competing scenes of active life, in professional, laborious, scientific, or pleasurable pursuits, so distract the thoughts and attention of men, as to prevent the one prevailing thought from being constantly present before the mind. Not so with woman;—her lot in life is differently cast. The earnest and often necessary pursuits of men form generally but a fragment of female existence; and in the young, modest, retiring female there is nothing to break the current of her thoughts, or to interfere with the paramount influence of this strong, and, I will say, beautiful instinct. But, if it be the source of some of the most touching traits in the female character, it is often the source of unhappiness, ruined health, and premature dissolution. The attachment of the young female to the object of her affections is, of all mental influences, the most powerful; so powerful, as often to absorb and set at nought all other considerations. It is the sudden—often rude—disruption of a long cherished and, perhaps, concealed attachment, which undermines the health, prostrates the vital actions, and lays the foundation of hopeless and consuming disease. Too much stress is generally laid upon ungratified sexual instinct; it has its influence, and, in some minds, a powerful one; still, as far as my observation has reached, it is much frequently the cause of injured health than a strong attachment abruptly broken. To this, as a starting point, I have been able to trace many cases of chlorosis; and when, in such instances, the strumous diathesis prevails, there are strong grounds to apprehend its ultimate issue in phthisis.

(To be continued.)

Hospital Reports.

THE LONDON HOSPITAL.

STRANGULATED INGUINAL HERNIA IN A FEMALE AGED 72; OPERATION; RECOVERY.

(Under the care of Mr. MAUNDER.)

E. N., aged 72, the subject of a double inguinal hernia, was admitted on January 24th, 1867, with the rupture on the left side in a state of strangulation. The patient was very thin, and the soft parts being very lax, the swelling hung over the upper and inner part of the thigh, and at first sight simulated a femoral hernia of unusual shape (ovoid). On examination, however, it was clear that the case was of the inguinal variety, inasmuch as the whole tumour could be carried to the inner side of the spine of the pubis, and its neck could be defined with comparative ease. Poupart's ligament was not well marked. The base of the tumour passed into the labium, and when the muscles bounding Scarpa's triangle were brought into action, it was evident that the tumour was not in this space but simply overhung it.

The stricture (very tight) proved to be at the mouth of the sac, necessitating the opening of the latter. The chief contents (bowel) were reduced, a portion of old adherent omentum being of course left down. No bad symptom followed, and the patient is convalescent, the wound having healed.

CARCINOMA OF GLANDS OF NECK FOLLOWING EPITHELIOMA OF TONGUE; LARYNGEAL; DYSPNŒA; TRACHEOTOMY; DEATH THIRTEEN DAYS AFTER.

(Under the care of Dr. Ramskill.)

From Notes by Mr. JAMES ADAMS, House-Surgeon.

William Bruce, 49, admitted January 22nd, 1867, was suffering during the year 1865, from epithelioma of the tongue, the diseased part of which was removed in December of that year by Sir William Fergusson. He remained free from disease until November, 1866, when he noticed a swelling on the left side of the thyroid cartilage, which rapidly extended, soon occupying the whole of the submaxillary and parotid regions. This was treated for sometime by injection, under the care of Dr. Broadbent, without much benefit however. The tumour increasing, at length caused considerable difficulty in inspiration, which was accompanied by a loud crowing noise, and only accomplished by violent muscular exertion: expiration normal. On admission the breathing was in the same condition; the whole of left parotid and sub-maxillary regions occupied by a red, indurated swelling. Lips and face of a fair colour. It being considered advisable to open the trachea, he was placed in a room at a temperature of 70, the air being duly moistened by steam, and I proceeded to operate. When he was laid with the head thrown back, the difficulty in breathing was increased, and before the operation was finished he became livid, and then pulse and respiration ceased. I at once got the tube in, and artificial respiration was immediately commenced; and after a few minutes we had the satisfaction of seeing him take an inspiration. After this he fainted several times, and on the following morning, about seven, he ceased breathing again, but without any obvious cause (the tube being clear); Mr. Jones, the dresser, was immediately called to him, and, with artificial respiration, soon restored him. After this he went on very well, could speak easily, and took plenty of nourishment; the edges of

the wound became ulcerated; and after some days a fluctuating swelling appeared on the right side; this was opened, and discharged unhealthy-looking pus. A few days before death he became weaker, and gradually sunk on the 14th February.

Post-Mortem.—The left anterior upper triangles of neck were occupied by a hard mass, which had ulcerated superficially, and was also disintegrating in the centre; the disease also affected the parotid gland, and all the cellular tissue in front of the neck was much thickened. The larynx was still of its normal shape, so that it was evident that the dyspnœa, if caused by direct pressure, must have been owing to pressure on its posterior aspect; and on removing the larynx, there was found a deposit of the same nature as the rest of the disease in the submucous tissue over the left arytenoid cartilage; it was ulcerated on its anterior surface, and sufficiently moveable to fall within the arytæno-epiglottidean folds, and obstructed the upper opening of the larynx. The submucous tissue around was much thickened and infiltrated with serum.*

The right circo-arytænoidens posticus was a very large, firm muscle; the left smaller, pale, and very flabby.

CASE OF COMPOUND COMMINUTED DEPRESSED FRACTURE OF SKULL; TREPHINING; TEMPORARY PARALYSIS OF 6TH, 7TH, AND 9TH NERVES; PARTIAL HEMIPLEGIA OF LEFT SIDE, AND PARTIAL ANÆSTHESIA OF LEFT SIDE OF FACE.

(Under the care of Mr. CURLING.)

Reported by Mr. JAMES ADAMS.

Fred. Amos, 35, labourer, a man of temperate habits, was admitted on January 26th, with a compound comminuted fracture of the skull in the right fronto-parietal region; a portion of bone irregularly triangular in shape, about three inches in area, being depressed, and there were one or two fragments lying in the wound which were removed at once. He was in a semi-comatose state; but could be roused, and there was no paralysis.

Mr. Curling at once proceeded to elevate the depressed portion, which was easily done, after sawing off a projecting angle of bone; but the piece was found to be quite detached, and was removed. The dura mater was wounded to a very slight extent, there being slight laceration, about one-eighth of an inch long.

Soon after the operation the pulse rose to 120, moderately full, and by the 28th had fallen 70. He retained his consciousness, but was somewhat drowsy. On the 30th, the left pupil did not act so *readily* as the other, although there was no appreciable difference in size in a moderate light. Had a rigor in the evening. On the following morning there was paralysis of motion in left hand and arm. Also complete paralysis of 6th and 9th nerves, and incomplete of portio dura and portio mollis, and the left pupil became dilated. Order—Hyd. chlor. gr. iij. p. opii gr. ss. 4tis horis. wine ℥vi.

February 1st. Has taken three doses of calomel and opium; and the bowels have been opened several times. Pulse 80, and weak; there is some return of power in left arm; wine increased to ℥xii. The edges of the wound are surrounded by a slight erysipelatous blush.

He answers questions rationally, but when left to himself his mind wanders considerably.

February 2nd. Can move left arm readily; action of external rectus and facial muscles restored. The tongue, which is dry and brown, is still pushed somewhat towards the left side. He has vomited several times, and his bowels are much relaxed. Mist. astringens. Towards evening the diarrhœa and sickness abated.

February 3rd. The tongue is still dry and brown in centre, with red edges and tip; bowels acting very frequently; erysipelas spread over right cheek. He gradually became weaker, and died at six A.M. on the 4th.

Post-Mortem eight hours after death.—Rigor mortis persistent. Large wound in scalp on right fronto-parietal region, leading through through an aperture in the bone, of an irregularly triangular shape, down to the dura mater, which was covered by a considerable quantity of pus, on removing which a small hole, about the size of a split pea, was seen in the dura mater. There was a considerable quantity of purulent fluid in the arachnoid, and the surface of the right hemisphere was covered with a greenish lymph, which was most abundant near the hole in the dura mater. The right anterior lobe was extensively lacerated. The sub-arachnoid spaces contained a large quantity of fluid, and on the left side a small quantity of lymph. In the substance of the right anterior lobe was a small clot. There was purulent fluid in the lateral ventricles, and the choroid plexuses were covered with lymph. The fracture was found to extend into right orbit, and across the middle fossa of the skull as far as the petrous bone.

* This case appears to me to be of much interest, as it was open to doubt whether the dyspnœa was produced by direct obstruction, or pressure upon the recurrent laryngeal nerve.

Reviews.

CLUB-FOOT: its Causes, Pathology, and Treatment. Being the Essay to which the Jacksonian Prize for 1864, given by the Royal College of Surgeons, was awarded. By WILLIAM ADAMS, F.R.C.S., Surgeon to the Royal Orthopædic and Great Northern Hospital, &c. Pp. 422. London: Churchill and Sons. 1866.

THE long period which Mr. Adams has devoted to the study and practice of orthopædic surgery, in which club-foot occupies a very prominent place, renders his contributions on such a subject most welcome to the profession, and the more especially as he has laboured to establish, not only the practical principles on which such deformities should be treated, but the theoretical and physiological laws which are concerned in their production, and which must be studied in all attempts for their relief. Nor, while according a just due of admiration to the brilliant discoveries of Delpech and Dieffenbach, and more especially to Stromeyer, must it be forgotten that the merits of tenotomy have in the present day been somewhat overrated, and Mr. Adams has proved that at least an equal degree of importance is to be assigned to recent improvements in the mechanical apparatus employed, as to the use of the knife, however skilfully it may be handled in the division of tendons. The fact is, that modern orthopædic surgery does not rely solely either on surgical operations or on mechanical appliances, but rather on a judicious selection of one or the other, according to the suitability of the respective cases, or on a combination of the operative and mechanical means, together with a well regulated system of gymnastics and special muscular exercises. It is the province of empiricism, rather than of true science, to exalt one of these methods above the rest, and to insist on its exclusive adoption; but surgeons of experience and reflection like Mr. Adams, examine carefully the valuable features in each, and apply them to individual cases as circumstances may suggest.

With reference, however, to subcutaneous tenotomy, which has undoubtedly been one of the triumphs of modern scientific surgery, the original experiments and dissections made by Mr. Adams have thrown a most important light upon the operations of nature in the repair of tendons, and consequently upon the processes which are set up after the surgical treatment of club-foot. Stromeyer and others considered that, by the division of the tendons, such a relaxation of the muscles was effected by a physiological action as to compensate for the previous shortening; but Mr. Adams has conclusively shown that the tendon itself is capable of reproduction or regeneration, and that the newly formed tissue acquires, within a few months of its formation, the structural characters of the old tendon so perfectly that it can be distinguished with difficulty even under the microscope. The greatest length of perfectly formed new tendon which he has seen was two inches and a quarter, in a girl aged ten. Mr. Adams also considers that the perfection of the reparative process is in direct proportion to the absence of extravasated blood and inflammatory exudation, and he regards the integrity of the sheaths of the tendons as a matter of importance, by preserving a connection between the divided ends of the tendon, by furnishing the matrix in which the nucleated blastematous or proper reparative material is effused, and by giving definition and form to the newly-

developed tendonous tissue. The time required for the formation of the new tendon is estimated at about a fortnight in well-nourished infants, at three or four weeks in an adult; but in atrophied, paralytic limbs, at not less than five or six weeks, and it is important in the treatment that gradual extension should be practised after tenotomy, in order to regulate the length of the new material during the period of its formation.

The study of the conditions under which club-foot makes its appearance, is a very interesting branch of inquiry, not only as a matter of scientific speculation, but also from its bearing on the practical management of this deformity, and Mr. Adams has devoted several chapters to the subject. He divides talipes into the non-congenital and the congenital, the former occurring much more frequently than the latter, the proportion being as three to two. The great majority of the non-congenital deformities of the feet depend either upon spasm or paralysis of certain muscles or groups of muscles, and are due to centric or eccentric causes, or in other words, either to disease within the brain or to some peripheral excitement, and as many of such cases are curable, and most are unattended with very serious results, they do not always fall under the notice of the surgeon. Frequently, however, by the long continuance of the morbid conditions, the limbs become permanently deformed, as when, for instance, the anterior muscles of the leg are paralyzed, and the heel is raised; the talipes being then caused not by active contraction of the posterior muscles, but in consequence of the loss of power of the anterior ones and an induced atrophy of the posterior, which latter are no longer required to be of their usual length. In treating of the congenital forms of club-foot, Mr. Adams relates the results of several dissections made by himself, and which prove, in opposition to the views of Scarpa, that in such cases there are several important deviations, both in position and form, of the astragalus. This bone is tilted obliquely forwards and downwards, and, to a certain extent, displaced from its socket, in consequence of the elevation of the tuberosity of the os calcis, and consequently, the anterior third, or more, of the superior articular surface of the astragalus is thrust on to the dorsum of the foot. This very important fact, together with the existence of other deviations from the natural form of the astragalus, is proved by the dissection of a fœtal foot made by Mr. Adams, and by other dissections by him of deformed feet, and the peculiarities are exhibited in several illustrations made from the dissections.

Having thus briefly noticed some of the most important of the original researches made by Mr. Adams, we have only space to refer to the indications which he considers necessary in deciding on the operation of tenotomy in preference to any other modes of treatment. When the foot cannot be fully everted, or brought to a straight line with the leg by manipulation, and when, in the attempt to do this, the inner malleolus does not become prominent, and when the os calcis either cannot be depressed at all, or only to a slight degree, so that, after the partial eversion of the foot, little or no flexion at the ankle-joint can be obtained, then he regards the operation as absolutely necessary. We need scarcely mention that the mode of performing the operation, together with the after treatment, is fully described in subsequent parts of the work, and the effects of mechanical appliances and of physiological exercises all receive their due share of attention. In conclusion, we cordially recommend Mr. Adams' essay as a most able and exhaustive work on the subject of which it treats.

A PRACTICAL AND THEORETICAL TREATISE ON THE DISEASES OF THE SKIN. By George Nayler, F.R.C.S., Assistant Surgeon to the Hospital for Diseases of the Skin, Bridge-street, Blackfriars. Pp. 292. London: Churchill and Sons. 1866.

Notwithstanding the great number of works already existing on diseases of the skin, Mr. Nayler does well in contributing another to this department of practical medicine, and his experience at the Bridge-street Hospital enables him to illustrate his remarks by examples drawn from actual cases. Amidst all the systems of dermatology which the prolific invention and ingenuity of modern writers have devised, that of Willan still holds its ground, and Mr. Nayler confesses that he is acquainted with none which, in point of utility, can supply its place. At the same time, no one supposes that this system is perfect; on the contrary, it is full of imperfections, but the same remark may be made of any system of dermatology or of nosology. For disease, after all, is not divisible, like the objects of natural history, into distinct classes and orders, forming so many individual entities, but is rather to be regarded as a deranged condition of the human system, displaying itself in a thousand different ways, according to personal peculiarities of constitution, situation on the body, epidemic and climatic influences, and many other modifying or determining circumstances.

Mr. Nayler comprises, in accordance with the leading ideas of Willan, the squareness, the papular, the vesicular, and the pustular affections in so many groups. Other diseases, as lupus, elephantiasis, and alopecia, are arranged separately, but the author has not thought it expedient to place in a class by themselves these diseases which are considered to owe their origin and existence to the presence of vegetable parasites, as pityriasis versicolor, tinea tendens, and favus.

The illustrations consist of seven very well executed plates (two being coloured), representing the anatomical structure of the skin, hair, and nails; the blood-vessels of the skin, and those existing beneath the nail; the structure of some of the vegetable skin parasites; and the structure and development of the acari (acarus folliculorum and a scabiei); and there are a few other illustrations scattered through the book.

The treatment recommended for the different diseases is in all probability that adopted by Mr. Startin, whose clinical assistant Mr. Nayler was for some years at the Skin Hospital, and he could not well follow a better guide. The book is very well got up, the type is large and distinct, and the paper is tinted.

We should recommend Mr. Nayler to pay more attention to the spelling of scientific terms, more especially in a work which is intended, as he tells us, as a guide for students. Ichthyosis, for instance, is persistently spelt *icthyosis*; herpes circinatus is spelt *circinnatus*; pompholyx is spelt *pompholix*; and the Greek etymology of eczema is given wrongly. These are not typographical errors, as the words are never spelt rightly, and their are many minor errors of the same kind, as Dr. Pereira figuring as *Pareira*; érysipelè printed for *érysipèle*; Kuchenmeister for *Küchenmeister*; liquor sodæ arsenitis for *liquor sodæ arseniatis*; and a large number of similar inaccuracies, which it appears strange should have escaped the notice of the gentleman whose services in revising the book in its passage through the press are gratefully acknowledged by Mr. Nayler.

CURRENT LITERATURE.

Among the most interesting of recent French publications is the *Dictionnaire Annuel des Progrès des Sciences et Institutions Médicales*, edited by M. Garnier, and of which the third volume, that for 1866, has just been issued by Baillière. It is, in fact, what it professes to be, a complete dictionary of the various contributions to medical science during the year. The alphabetical arrangement is certainly most easy for reference, and we are happy to find that the labours of Englishmen in the several departments are very fairly represented.

Under the title, Matter—*Its Ministry to Life in Health and Disease; and* Earth—*the Natural Link between Organic and Inorganic Matter*, Dr. Hawksley has re-published his views respecting earth closets, to which we some time since drew attention. Those interested in the question cannot do better than look over Dr. Hawksley's pamphlet.

Mr. Skey has re-published, in a separate form, his six lectures on hysteria, delivered last session at St. Bartholomew's Hospital, and which have previously appeared in a contemporary. As secondary titles are given to the work, we will quote the name of this little book in full. Hysteria: *Remote Causes of Disease in General; Treatment of Disease by Tonic Agency; Local or Surgical Forms of Hysteria, &c.* We have nothing to say against a hospital lecturer insisting on the use of wine in the treatment of disease or injuries; but surely Mr. Skey need not go beyond the walls of his own hospital to see that he is by no means the only surgeon who employs this agent. Does he really think it necessary to call the attention of

the profession to the *tonic treatment of disease*, or is it not rather late in the day to depict hospital surgeons as addicted to free depletion? If the book is intended for the public, it may serve to show that Mr. Skey will allow his patients full diet and a supply of stimulant; but we should have expected something above this from the Consulting-Surgeon to St. Bartholomew's Hospital.

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The Medical Press and Circular.

"SALUS POPULI SUPREMA LEX."

WEDNESDAY, FEBRUARY 27, 1867.

THE INDECENT ADVERTISING QUACKS.

THE *Pall Mall Gazette*, which we noticed last week as commencing a most righteous crusade against one of the monster evils of the day—namely, the distribution of indecent quack advertisements in our leading streets and thoroughfares, continues to carry on with great spirit and ability the attack it has begun. Our contemporary, who is, of course, obliged to be somewhat reticent, from a regard to public decency, as to many of the grosser aspects of the question, very mercilessly lays bare some of the ramifications of the system it denounces. Originating with a set of pseudo-medical swindlers, or rather springing from several gangs of the same description, the machinery by which the nefarious trade of victimizing the timid, the nervous, or the imprudent, is carried on is by means of the great facilities afforded by the periodical press, by the transmission, through the post, of mendacious books and pamphlets, and by the exhibition of so-called museums of anatomy, which are simply dens of disgusting filth, where the arch-impostor, who exhibits the show, receives and fleeces his victims.

It might well be asked by any philosopher or philanthropist why such things are allowed to exist, for even if the laws of the country are insufficient (which, by the way, we very much doubt), to suppress the abuse, why is the public press, in general, silent upon the subject? It is certain that the silence is due to no squeamish regard for the morals of the community, for we find matters introduced into our public newspapers which might raise a blush on the cheeks of the least modest of men or the most immodest of women; and it is not from any feeling of leniency for the quacks themselves, inasmuch as every other form of quackery, or supposed quackery, is remorselessly castigated by these self-appointed censors of the public morals. Let some respectable member of the Medical Profession fall into a pardonable error of judgment, let one medical man conscientiously differ in opinion from another; nay, let some honourable and perhaps learned medical man refuse to adopt the same views on some difficult point as are held by the so-called guides of public opinion, and forthwith the flood-gates of abuse are let loose, and innumerable are the sarcasms and the invectives hurled at the study and the practice of medicine by persons who, perhaps, really know nothing whatever of the subject on which they write. But the immunity of the indecent quacks, who trade in what are called secret diseases, is secured by the operation of a motive which reflects the utmost disgrace upon their protectors. The fact is, that many of the journals actually derive a considerable part of their profits from the insertion of the indecent advertisements to which we allude, and what is a most ludicrous, if it were not a disgusting feature in the management of many of these journals is, that some, which are the loudest in exposing what they conceive to be the social abuses of the age, are the greatest pecuniary gainers in this infamous traffic.

But, although it is bad enough that the advertising columns of some of the general newspapers should teem with the disgusting announcements in question, it is still worse that the sanctity of domestic life should be invaded by the books and pamphlets sent by the obscene quacks through the medium of the general post. Over and over again have respectable gentlemen of the clerical profession, and of the army and navy, written to the medical journals to repudiate the filthy trade, and to ask indignantly why the dissemination of such publications should be allowed; but the general Press is still silent, and the nuisance is allowed to proceed unchecked and uncontrolled. The *Pall-Mall Gazette* is almost the only journal which has ventured to grapple with the evil, and it deserves the thanks of the community for the courageous attempt.

It is sheer nonsense to pretend that the existing laws are insufficient to suppress, or, at all events, to diminish the monstrous evils resulting from indecent advertising and the transmission, through the post, of indecent quack books. If either of these modes of publishing were practised anonymously, there would necessarily be a difficulty in detecting the delinquents; but the fact is, that the publishers in both cases are always perfectly well known, and the very aim and object of the books and the advertisements is to make known some scoundrel or other, whose residence is always indicated in precise terms, although his name is usually a fictitious one.

Still, as it is no defence to an action for libel to plead the adoption of a false name on the part of the libeller, so the LISTONS, the BRODIES, the COOPERS, and the rest of the gang of indecent quacks, could easily be traced by prosecuting either the publishers of their trash or the proprietors of the papers which insert their advertisements.

The so-called anatomical museums, again, are the offspring of the present age, and owe their origin entirely to the ingenuity of the indecent advertising quacks. In these places the models and preparations are exhibited with the twofold object of stimulating the sensuality of the debauchee, or inflaming the passions of the young, on the one hand; and on the other, of representing the results of vice or folly in the most hideous and exaggerated shapes, in order to advertise the pretended skill of the quack-proprietor of the show, who in a back-room of the establishment waits to entrap the unwary. It is quite needless in a Medical Journal to remark that if any lay persons possess sufficient curiosity to desire an acquaintance with anatomy and pathology, the splendid museums of the Colleges of Surgeons in the different capitals of Great Britain are open to their inspection, and that the introduction may be easily obtained; but as these lines may fall into other hands besides those of medical men, the observation may be of service. The only possible excuse that might be offered for the continuance of the anatomical museum abomination is thus cut away, and we have no hesitation in stating that the police regulations at present in force might be made available for suppressing the nuisance if the authorities would only set their shoulders to the wheel.

As we hinted last week, the question has lately been taken up in influential quarters, and it is very probable that if no speedy means be adopted for putting a stop to the existing abuses the attention of the House of Commons will be drawn to the subject.

THE PROFESSORSHIP OF ANATOMY AND PHYSIOLOGY IN THE ROYAL COLLEGE OF SURGEONS OF IRELAND.

THE Council of the College met on Thursday last, the 21st inst., pursuant to Charter, to elect a Professor of Anatomy and Physiology, in the room of Dr. ARTHUR JACOB, and a considerable number of the Fellows of the College were present to witness the election. According to the usual course of proceeding, numbers representing the twenty-one members of Council were put into a box, and of these seven were drawn to elect. The names of the seven members on whom the lot fell having been declared, the following very stringent declaration was administered to them by the President:—

"I, do solemnly and sincerely promise and declare, that I will to the best of my knowledge, skill and judgment, without hatred, evil-will, partiality, affection, favour, or fear, justly, equally, and faithfully discharge the trust now reposed in me to elect the most fit and proper person to fill the situation of Examiner or Professor of

And, further, that I consider myself bound to elect the candidate who affords the most unquestionable proofs of good character and of ability, acquirements, industry and perseverance applied to the branch for which I am now called upon to elect a Professor or Examiner; and that I do not consider previous services in the College, in this or any other department as establishing a peculiar claim to a preference. And, also, that I have not, directly or indirectly, promised to vote for or favour any particular candidate."

Having taken the affirmation they retired to consider their decision. On this occasion Dr. E. D. MAPOTHER, Professor of Hygiene in the College, was the only candidate for the Chair, and he was accordingly declared duly elected.

Dr. MAPOTHER's name is already so well-known to our readers that it is almost unncessary for us to enter into the claims put forward by him for his election to the honourable position to which he has attained. It is only necessary to say that within thirteen years from receiving his profession, and without the slightest impetus from personal or professional advantages, his untiring industry, ceaseless application, and great mental qualifications have placed him in one of the first, if not *the* first, rank as a teacher in the Irish School of Surgery. Commencing his medical career as a pupil of the late Dr. JOHN HATCH POWER, Professor of Surgery in the College, Dr. MAPOTHER now holds the Doctorate in Medicine of the Queen's University and the Fellowship of the Royal College of Surgeons. He is Surgeon to St. Vincent's Hospital, Public Officer of Health for Dublin, Professor of Hygiene in the College, and an Honorary Member or Office-bearer of the Epidemiological Society, the Metropolitan Association of Officers of Health, the Surgical and Statistical Societies of Ireland. As a writer, he has found opportunity to give to the Profession a Manual of Physiology, Lectures on Public Health, of which a second edition has just appeared; an Essay on the Hip-joint, for which he was awarded the gold medal of the Pathological Society, and many valuable contributions to THE MEDICAL PRESS AND CIRCULAR.

We have refrained, for obvious personal reasons, yet perhaps to the surprise of our readers, from any comment whatever on Dr. MAPOTHER's candidature previously to the election, in the belief that his merits would carry their own acceptance by the College. We are no longer forbidden to express our satisfaction at a selection of a successor to Dr. ARTHUR JACOB who cannot fail to impart an impetus to the School of the College, and afford a new guarantee to students for the efficiency of their staff of instructors. Truly, the Council might have selected an older man; but they have evinced in their choice

a regard for the interests of their School superior to religious or personal considerations. Dr. Mapother has, both by his career as a private teacher, and as acting temporarily for Dr. Jacob, earned a character for thorough acquaintance with the subjects of the Professoriate, capacity for imparting instruction, and indefatigable perseverance in the discharge of his daily routine of duty which may well condone his want of years.

Notes on Current Topics.

Relative Longevity of the Married and Single.—Husbands are henpecked, it is said, and bachelors are bonny lads, and free. A man's doom is fixed when the marriage service is ended. Then he is bound for life, and must submit to all the whims, and caprices, and tempers, and curtain lectures of his better-half. True, there is a Divorce Court, but the overwhelming majority can never get free again unless death extends a friendly hand; whereas, your bachelor is his own master, with nobody to control him, nobody to criticise, or utter a snappish word, He is a king in his castle, rejoicing in his absolution, and looking down in pity on his neighbours in marriage fetters next door. Divergent as these two states may be, there are equivalents which balance the good of the one against that of the other, and which, perhaps, were we to investigate, would show the advantage to be on the side of the married man. One test has latterly come under our observation, which no one can gainsay, and which we present to our readers. We quote the following figures from the report of Dr. Stark, of the Scotch Register Office, for the year 1863. From the age of 20 to 25 the death-rate of bachelors was found to be double that of married men, between 25 and 30 it was 13·7 per 1000 among bachelors, and only 8·6 among married men; from 30 to 35 it was 14·7 against 9 per 1000, and so on, the difference gradually lessening every five years, but never becoming totally lost, so that from 60 to 65 the death-rate of bachelors was 43·3 per 1000, against 38·8 of married men. Or taking the average age of the two, respectively, from twenty years to the close of life, that of the married was 60 years, of the bachelors only 40 years; or, as a better and fairer period, from the 25th year to the close of life the mean age of married men at death was 60·2 years, that of bachelors 47·7. Thus a man who marries will probably live eleven years longer than if he remained single. What is there then in the married state—for something there must be—which renders it more conducive to longevity than single blessedness? May we not fairly infer that it yields more contentment, more comfort, more satisfaction, and consequently more happiness than the other; and that these things have a conservative bearing upon the health? Be it as it may, when a man has some one who reciprocates his affection, welcomes him home, rejoices in his prosperity, cheers him when depressed, in fact, who is the light and life of his dwelling, he must be in all respects in a far better condition than he who lives uncared for and alone.

Vaccination in Scotland.—The act which came into operation 1st January, 1864, and enacts that every child born in Scotland after that date must be vaccinated within six months of its birth, bears rather hard upon the poor; while it imposes a penalty for neglect, it prescribes a fee of 1s. 6d. to be paid by the friends of the child to the public vaccinator. His services are gratuitous only in case of pauper's children. Now there are numbers of the people in exceedingly straightened circumstances, though not actually paupers, who are unable to pay the fee; but they can only obtain gratuitous vaccination after having incurred the penalty of twenty-one shillings for breach of the law. Still, as they cannot pay, the defaulters are numerous, as is seen in the annual report of the Board of Supervision for the year ending June 30, 1866. These returns do not include cases in private practice. In the whole of Scotland there were 13 successful cases to 10,000 of the population. The proportion was highest in the following counties:—Wigton, 58; Caithness, 53; Forfar, 46; Inverness, 33; Aberdeen, 25; Argyle, 22; Dumbarton, 15. The lowest proportions were—Kinross, 1; Roxburgh, 1; Clackmannan, 2; Sutherland, 3; Perth, 3; Berwick, 3; Bute, 4; Edinburgh, 5; Lanark, 6. The large number of 2092 defaulters was recorded in Lanark, being 33 per 10,000; in Renfrew the proportion was 28; Edinburgh 14; Aberdeen 3 per 10,000. It is to be hoped that the suggestion of the Registrar-General for Scotland that the act be amended will be adopted, so that those who cannot pay may be able to have their children done free.

University of Cambridge.—Scholarships for Natural Science at Sidney Sussex College.—There will be an examination at this College on October 8th, in Natural Science (electricity, chemistry, geology, and anatomy), for two Scholarships of the value of £40 per annum each. It will be open to all who shall have been entered on the College Boards, before October 1st. Further information may be obtained from the Rev. J. C. W. Ellis, tutor of the College. Mr. Walker, who was admitted first in the Natural Science Tripos, last December, has just been elected a Bachelor Scholar of the College, Superintendent of the College Laboratory, and Natural Science Examiner. There is, we understand, at this College a considerable fund available for the promotion of Natural Science, so that students who deserve encouragement, are pretty sure to meet with it.

Another Princess.—Last Wednesday morning the Princess of Wales was delivered of a female child. As Her Royal Highness had been suffering some days from acute Rheumatism, some anxiety for her has been exhibited throughout the country. As on previous occasions the confinement was not expected to take place until a later period, and it is not improbable that, but for the painful illness under which the Princess was labouring, parturition might have been postponed for another month. Mother and child are progressing favourably, and we hope the last traces of rheumatism may soon disappear.

Presentation of the Copland Testimonial, London Hospital.—On Monday, February 18th, a meeting was held in the Anatomical Theatre of the London Hospital Medical College for the purpose of presenting to Mr. Oswald Copland a valuable watch as a token of their admiration of his gallant conduct at the late calamitous accident in Regent's Park. The chair was occupied by the Rev. T. J. Rowsell, M.A., who in a very able speech brought the particulars of the event before the meeting, and commented on the heroism and modesty of Mr. Cop-

land, and also the pleasing unanimity and liberality of those who, wishing to show their appreciation of this brave man's conduct, had opened their purses as well as their hearts, and had thus the gratification of presenting him with a suitable and lasting token of their gratitude. The word gratitude was well-chosen, for every one of his fellow-students and superiors must feel a vast deal of pleasure and thankfulness in being able to count him as one of them; regarding the successful attempt to save life, not only as affecting him now, but also as a forerunner of a long career of hard work, an indication of indifference to danger whenever met, and a stern sense of duty, which must *merit*, if not secure, professional success. Mr. Copland expressed his acknowledgments, and a vote of thanks to the chairman terminated the proceedings.

Water Supply of London.—An interesting paper on this subject was read last week by Mr. Thomas Beggs before the Society of Arts. Without ignoring those considerations relating to health, comfort, and cleanliness on which we have so often dwelt, Mr. Beggs devoted his chief attention to other reasons for demanding an improved supply. Of these we may mention the utter inadequacy of the existing arrangements in case of fire. Why should not London have a constant supply of water at high pressure, and why should not hose be kept ready in all large establishments? Norwich, Wolverhampton, Nottingham, and other large towns have a constant supply; if London had the same, half the property destroyed by fire might be preserved. Mr. Beggs advocated the plan of bringing the water from the Cumberland lakes, as in his opinion the most practicable, and he would make the several metropolitan, parliamentary boroughs corporations for the purposes of general government, considering that such corporations could easily contract with existing and new water companies, or make other arrangements for an efficient supply.

Payment of Medical Officers for Cholera Attendance.—It will be remembered that the Medical Officers of the North Dublin Union were offered by the Board of Guardians a fee of one guinea for every day on which they were on special duty at their dispensaries, no allowance being made for the extra duties discharged by them on other occasions during the epidemic. Several of these gentlemen, feeling that they were not well treated, declined the offer altogether, while others accepted it with the reservation that they regarded it only as part payment. An appeal to the Poor-law Commissioners from the Medical Officers has resulted in the following letter:—

"Poor-Law Office, Custom House.
"*February 19th*, 1867.

"The Commissioners for administering the Laws for relief of the poor in Ireland transmit to you herewith copies of two communications which have been addressed to them by Medical Officers of the North City Dispensary District, on the subject of the amount of remuneration awarded to them by the Board of Guardians for extra duty during the late prevalence of cholera and diarrhœa in the district, and the Commissioners request that they may be favoured with the observations of the Board of Guardians on the subject. The Commissioners desire, at the same time, to point out, that by the general regulations of the 25th August last, it is provided that the Medical Officers shall receive the remuneration for their services under the order, in proportion to the nature and extent thereof; and, in the opinion of the Commissioners, the extra remuneration should have reference to the whole time during which time cholera and diarrhœa were dealt with under the order, that is to say, during the continuance of the epidemics. By the 65th Section of the Sanitary Act, '66, the Guardians are empowered to determine, subject to the approval of the Commissioners, the amount of remuneration to be awarded for extra medical services performed under the direction and regulations of the Commissioners; and the Commissioners are empowered, if they shall not approve the amount determined by the Guardians, to fix the remuneration, by order under seal, proportioned to the nature and extent of the service.

"By order of the Commissioners,
"B. Banks, Chief Clerk."

We accept the declaration of the Commissioners, that "the extra remuneration should have reference to the *whole time* during which cholera and diarrhœa were dealt with under the order—that is to say, during the continuance of the epidemic," as a complete verdict in favour of the claims. It is to be regretted that the Guardians, who, we believe, as a whole, would be anxious to act liberally towards their Medical Officers, should abrogate their sense of justice at the bidding of a few members who never give but grudgingly and of necessity.

The Late Mr. Thomas Martin, of Reigate.—The death of Mr. Martin, of Reigate, although an event which has occurred in the course of nature, is one which should not be allowed to pass without respectful comment on the part of the medical journalist. Although nominally occupying only the position of a provincial practitioner, Mr. Martin was an accomplished scholar, a finished gentleman, and a true and practical philanthropist. In every movement, having for its object the welfare and advancement of the Medical Profession, he took an active and permanent part. The association formed in 1812 for the improvement of the status of the general practitioners, and the President of which was Dr. G. M. Burrowes, counted Mr. Martin as one of its most zealous members; he was equally energetic in promoting the establishment of the Provincial, Medical, and Surgical Association, now the British Medical Association; and he subsequently, under the Presidency of the late Mr. Pennington, was an active member of the Institute of Medicine, Surgery, and Midwifery, the object of which was to obtain a Medical Reform Bill. The societies which he started in his own very neighbourhood for the friendly intercourse of the profession, for the improvement of the condition of the poor, and for the advancement of education are so many existing monuments to the kindness of his heart, the enlarged sphere of his sympathies, and the energy of his character.

Official Recognition of the Profession.—We have always advanced the principle, that the status of our Profession does not rest in ceremonialism or pomposity, but rather on services of value rendered to the public. We cannot, however, permit it to be forgotten that, as a body, including many thousands of highly-educated gentlemen, our Profession is entitled to the same consideration which politeness accords to the kindred ranks of Law and Divinity; and when occasions of ceremony occur, and honour is done to the Law, the Church, the Army, or Navy, the representatives of medicine ought to receive the same regard. We observe that, at the late Municipal Banquet at Dublin, amongst the toasts of the Bar, the Church, Provincial Corporations, the Solicitors, and the Press, the Medical Profession is not mentioned at all, although both the President of the Royal College of Surgeons, and a

gentleman holding a high official position in the King's and Queen's College of Physicians, were sitting within a few feet of the Lord Mayor himself. Every profession received its full share of honour but ours, yet no profession had a better claim to public and official recognition. We cannot forget that this was not a mere oversight, because we are aware that on one occasion the President of the College of Physicians asserted his position by leaving the room, and on others the toast of the Medical Profession was placed in a position of neither honour nor dignity in the toast master's list. The representatives of our Medical Corporations did not, of course, anticipate this omission, but it will be in future for them in whom reposes for the time the maintenance of the dignity of our Profession to ascertain before hand the part which they are to play, and, if necessary, to mark their sense of the slur cast upon them by their conspicuous absence.

THE HORRORS OF CHIGNONS.

The alleged discovery of the parasites called *Gregarines* in the artificial chignons now so common has given rise to not a few very sensational paragraphs. One enthusiastic correspondent of a morning contemporary, signing himself Investigator, thus describes the results of his examination, under a powerful microscope, of a chignon "purchased at a fashionable hair-dressers:"—

"From the mass of hair composing the chignon I selected for experiment about 150 hairs, and commenced by carefully cleansing them from grease and other impurities in a tepid solution of potash, and drying them in a current of heated air. Upon submitting them to examination by a moderate power, I found the hair, which was of a dark brown colour and fine texture, perfectly clean and free from any parasitical appendages, until within half an inch of what was evidently the natural end of the hair; when a multitude of small dark knots or protuberances on the outer cortical were visible. Upon carefully detaching some of these—an operation of great difficulty and delicacy—and placing them on an object-glass under a much higher power, it was immediately evident that they were innumerable specimens of the so-called "gregarines." As nearly as I could estimate, half an inch of a single hair would yield over a thousand of these disgusting epizoa in their embryo condition, and enveloped in a glutinous substance. Having thus satisfied myself of their existence, I next proceeded to ascertain if they were possessed of vitality, and if so, how it might be called into action, and by what means, chemical or otherwise, destroyed.

"Now it is well known that gentle and continued heat affords the most favourable conditions for the development of this class of insect life. I therefore placed about a dozen ends of the hair between two pieces of felt slightly oiled, and submitted it to a moist heat of 120° for six hours; and also bound upon the neck of a common hen—a convenient place having been carefully shaved for the purpose—a number of hair-ends, and placed the bird in front of a stove for about the same time. At the end of this period the 'gregarines' which had been placed in felt were carefully examined. They had undergone great development, and more than a score showed unmistakeable signs of life. But on removing the hairs from the neck of the hen, and placing them under the microscope, a most extraordinary change in the ova appeared to have taken place. The hairs were swarming with the released epizoa; nearly all, indeed, were more or less detached from the envelope, and presented many of the unmistakeable peculiarities of the pediculus humani capitis.' In many the mouth was furnished with a proboscis, the antennæ as long as the thorax, and the depressed segments of the abdomen, were clearly visible. It was abundantly evident that no process to which the hair had as yet been submitted had even impaired, much less destroyed, the vitality of the 'gregarines.'

"I cannot venture to trespass upon your space by giving a detailed account of the experiments made to ascertain how this vitality could be destroyed; suffice it to say that steeping in boiling water, and exposure to a dry heat of 360° Fahrenheit, totally failed to do so. The compound ethers, benzole, and the bichloride of mercury destroyed them completely; as also some of the mineral acids; but most of these would of course render the hair worthless to the chignon-maker, the beauty of its appearance being entirely destroyed. I regard these experiments as fully demonstrating the fact, that many ladies are wearing, perfectly unsuspected, upon their heads the germs of an insect life which may at any moment spring into a vitality that would prove distressing beyond measure, and be by no means easy to eradicate: these horrible insects multiplying with almost inconceivable rapidity, and their generation being governed by no well ascertained law. Moreover, it is a question for the medical faculty, and it is well worth considering, whether the rumoured reappearance of the most horrible disease, *phthiriasis*—common among the ancients, and of which Herod Antiochus, Callisthenes, and Sylla perished—is not owing to the wholesale wearing of the hair of the filthy Burlakes, of which so much is daily imported: the *Phthirus*, though of a different genus from the *pendiculus capitis*, yet much resembling it in many radical points."

Proceedings of Societies.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY.

Tuesday, Feb. 12th, 1867.

Dr. James Alderson, F.R.S., President.

ON THE NATURE OF THE WAXY, LARDACEOUS, OR "AMYLOID" DEGENERATION.

By William H. Dickinson, M.D. Cantab., F.R.C.P.,
Assistant-Physician to St. George's Hospital and to the Hospital for Sick Children.

The organic change formerly described as "waxy," latterly as "amyloid," affects many parts of the body at the same time. It consists of a morbid deposit first occurring in the walls of the small arteries, afterwards penetrating their coats and infiltrating the neighbouring tissues. It may be recognized by the action of iodine, which gives to the affected parts a reddish-brown colour, instead of the yellow tint which the same reagent bestows upon the healthy tissues. The solid viscera are increased in bulk by the exudation, while the same change in the mucous membranes renders them liable to extravagant secretion. The change was described in detail in the kidney, and shown to consist of a fibrinous exudation into the substance of the organ, and into the tubes in the form of casts. The casts are sometimes susceptible of the characteristic reaction. The conclusion that the material is essentially fibrinous was based upon the results of ultimate analysis, the contractile tendency of the deposit, its convertibility into fibrous tissue, and its apparent identity with fibrinous casts.

The disease was considered as affecting the whole body—not as confined to any particular organ. In the place of the general belief that the disorder is associated with tubercle, syphilis, or some other cachexia, it was shown that in a vast majority of cases it is produced by the loss of pus, or of some analogous discharge.

This view was based upon an analysis of 60 cases of the "amyloid" or waxy disease which came under the observation of the author. In 52 of these the change was apparently associated with the formation of pus. In detail, there were 47 cases out of the 60 in which there was direct evidence of profuse and long-continued suppuration. In 5 the post-mortem appearance were such as to lead to the inference that a loss of pus had taken place at some antecedent period. Excepting in the concurrence of suppuration with "amyloid" change, these cases had no resemblance to each other. Syphilis had existed in some, tubercular diseases in others, while in several there was no evidence but of local mischief. In 8 cases in which there was no evidence bearing upon the ostensible discharge of pus, there were 4 in which there was reason to believe that there had been albuminuria of the kind connected with tubular nephrities, the quantity of albumen being very large. A drain of albumen by the urine is equivalent in some respects to a discharge of pus. There remain 4 cases in which, from the imperfection of the notes and other circumstances, the disorder was not traced to its source.

The conclusion which associates the "amyloid" or waxy infiltration with the suppurative process was tested by an examination of the cases of the disease recorded by Dr. Wilks and Grainger Stewart. These writers have together reported 109

cases in which the body was examined and the antecedent disease was traced. Eighty-three, or more than three-quarters, depended upon undoubted loss of pus, while in the remaining 26 the disorders are of such a nature that it is not possible to doubt that suppuration must have existed in the majority, if not in all. It is sufficiently striking that so large a proportion should have been mentioned as associated with suppuration considering that these auteors appear to have recorded their cases without particular regard to this condition.

The connection between the discharge of pus and the so-called amyloid deposit is such that more or less of the organic change may be predicted whenever the long continuance of suppuration has been ascertained. The view that the disease is necessarily associated with syphilis, tubercle, or any especial cachexia, is disproved by several of the cases recorded. In one case it came on in consequence of suppuration from dilated bronchial tubes, in another after suppuration from a compound fracture, in a third from profuse discharge after an amputation, in two after pelvic abscess consequent upon labour.

The fact having been established that the removal of pus from the system causes a deposition of the characteristic material in the organs, the nature of the connexion was examined. Pus is an albuminous fluid which is alkaline, owing to the presence of potass and soda. The alkaline and earthy salts of pus amount, on an average, to 1 per cent. of the discharge ; of this, the salts of potass and soda form about nine-tenths. Details are given showing that the proportion of alkaline salts in the secretion is greater than in the corresponding blood, and it was shown how large an amount of alkali is by this means removed from the system. A discharge of pus is equivalent to a removal from the blood of albumen and alkali.

The characters of the "amyloid" deposit formed the next branch of the inquiry. Essentially consisting of fibrin, it remains to be seen on what the peculiar reaction depends. Ordinary fibrin is coloured yellow by iodine, as are the healthy tissues ; while the "amyloid" deposit takes the characteristic deep-brown. It was shown that if the diseased tissue were allowed to absorb a small quantity of potass or soda the peculiar reaction was destroyed, the tissue afterwards behaving in all respects as in health. This power of destroying the "amyloid" reaction is confined to potass and soda.

It was next shown that the "amyloid" deposit has a distinctive action with sulphate of indigo. Healthy tissue destroys the colour, while the "amyloid" retains it. The power of destroying the colour of sulphate of indigo is due to the free alkali present in the healthy tissue, absent from "amyloid."

Next were given the results of analysis of healthy and "amyloid" livers, in which it appeared, from the examination of seven healthy and seven "amyloid" organs, that the latter contained a proportion of alkaline salts diminished, on an average, by one-fourth, the potass and soda being diminished equally.

Finally, it was shown that the "amyloid" substance could be made artificially out of fibrin or albumen by removing or neutralising the alkali with which they are combined. This artificial "amyloid" matter was shown to the Society, and had all the reactions with iodine and indigo which are characteristic of the morbid deposit.

The following were stated as the conclusions of the inquiry.

The so-called "amyloid" deposit consists of dealkalised fibrin.

It is not necessary to repeat the reasons for supposing the deposit to be fibrinous.

That it is wanting in an alkali is shown by these considerations :—

1. The morbid deposit looses its characteristic reactions when it has been allowed to absorb potass or soda.

2. Organs containing this deposit yield on analysis a smaller proportion of the alkalies than do the same organs in a state of health.

3. Ordinary fibrin or albumen can be made to exhibit all the peculiarities of "amyloid" tissue by depriving them of alkali by artificial means.

The morbid deposit is of the nature of a residuum. It occurs in cases where the system has been drained by an alkaline and albuminous discharge, the blood, therefore, retaining an excess of fibrin with a deficiency of potass and soda.

The most frequent cause by which this deposit is produced is suppuration—a cause which is active certainly in five cases out of six. The loss of albumen by the urine has a feeble action of the same kind.

The term "amyloid" must fall into disuse as founded upon error. The author proposes the word *depurative*—depending upon the removal of pus—as fitted to describe the disease. The frequency of the change, the generally obvious nature of its cause, and the readiness with which it is detected during life, combine to give it great practical importance. It supplies a large proportion of the albuminuria which comes under the care of the physician, and is of constant occurrence in surgical wards, modifying the course of disease and the results of operations. A suggestion may be made with regard to patients subject to a purulent discharge. The food may be regulated so as to compensate, as far as possible, for the loss of albumen ; and liquor potassæ and liquor sodæ may be given so as to make up for the loss of alkali.

Mr. Gant asked if this so-called amyloid deposit could actually be converted into fibrous tissue or even into fibrin, seeing that it was already a degeneration. He remarked that if it could be shown that there was a distinct connexion between the occurrence of this degeneration and prolonged suppuration, it would be of very great importance.

Dr. Murchison had received great pleasure in listening to Dr. Dickinson's paper, and would state his opinions more especially as to the practical points involved in it. He doubted if the degeneration was so very frequently associated with previous suppuration, although there could be no doubt of its often being so, especially with suppuration of bone. On referring back to his own cases, he found that some had no history of suppuration, but instead of it constitutional syphilis or ague. As to the treatment which would be founded on Dr. Dickinson's theory, his was quite the reverse ; instead of alkalies, he relied on mineral acids, which he looked on as among the best remedies in such cases, as they invariably effected a great improvement in the system. With regard to the substance deposited in the tubules of the kidney, he looked upon it as fibrinous instead of being amyloid, and he would remark that the urine was not alkaline in those of his cases where it was tested.

Mr. Holmes referred to the frequency of the association of this degeneration with suppuration, especially of bone, and considered this an additional argument for getting rid of the diseased bone as soon as possible. He thought that many lives and limbs were sacrificed by neglect of this rule ; for in his opinion it was advisable to remove the diseased structure before the constitution became affected, as he thought that many of these diseases were originally local, but became constitutional from their protracted influence on the system. Billroth had pointed out that external disease produced internal degeneration, and had operated on the former for the relief of the latter.

Dr. Headlam Greenhow said it was a good thing to investigate the chemistry of disease, but he objected to the statement that suppuration was the invariable cause of amyloid degeneration, as he had lately had two cases, in one of which there was extensive amyloid disease, yet there had been no suppuration for twenty-three years, though the man had suffered from syphilis two years before that time, and had been affected with rheumatic fever and ague since the former period. Another had been perfectly healthy until his abdomen began to enlarge, and in this instance there was no history of syphilis. These cases, however, did not entirely disprove Dr. Dickinson's views.

Dr. Pavy considered the term amlyloid to be a very bad one ; the material effused was neither contractile nor organisable. In the spleen it was found in masses of a granular character, and without any organisation. In the liver it was generally diffused, the cells of that organ becoming angular by its means. He objected to the term depurative—first, because there might be suppuration without amyloid disease ; and secondly, there might be lardaceous organs without preceeding suppuration.

Mr. Solly said that the facts elicited showed the importance of early operation in disease of bone, and spoke of a case of disease of the hip-joint which had apparently induced lardaceous liver.

Dr. A. P. Stewart had had two cases—one fatal, the other improved. In neither was there the history of any suppuration of importance ; in one none at all. In treating such he chiefly relied on the mineral acids. He asked whether the albumen in the urine was the cause or consequence of the disease. In both his cases albumen had been present.

Dr. Dickinson thanked the Society for the way it had received his paper. In reply to Mr. Gant he stated that all fibrous structures become thickened by the effusion, and the changes can be seen going on in all stages. He agreed with Dr. Murchison that there were many cases without the history of previous suppuration. All he contended for was that such a history would be found in a majority of cases. Referring to

Dr. Greenhow's remarks, he objected that in one of his cases there had been no post-mortem examination. As to Dr Pavy's statement that the substance was not contractile, he would refer to the condition of the liver and kidneys in a recent case, for in the more chronic cases they became enlarged. With regard to the treatment by acids, that was in the more advanced stages, where they would do good as tonics; it was only while suppuration was going on that he would propose alkalies.

CAMBRIDGE PHILOSOPHICAL SOCIETY.

MONDAY, FEB. 18.

A COMMUNICATION was made by Dr. Airy, the Astronomer Royal, "On the Continued Change in an Eye Affected with Peculiar Malformation."

Professor HUMPHRY read a paper "On Some Points in the Anatomy of Chimpanzee, and the Consideration of the term 'Quadrumanous,' as applied to that Animal." His remarks were the results of the recent dissection of two Chimpanzees and referred chiefly to the differences between their lower limbs and those of man. He pointed out that the outer condyle of the thigh bone is round instead of being prolonged from before backwards, and flattened beneath, as in man. Hence there is comparatively little security afforded by the ligaments in the straight position, and little provision for the maintenance of the erect posture. The bones and joints of the ankle were shown to be constructed so as to permit free movement rather than to bear weight. With regard to the term "hand," and the objections which have been urged to its application to the lower limb of the monkey, Professor Humphry remarked that if we use the term to designate a certain modification of the fore limb—a certain deviation, that is, from the ordinary fore foot—we may with equal propriety apply it to a corresponding modification of the hind limb—a corresponding deviation; that is from the ordinary hind foot. We must not expect it closely to resemble the human hand but merely to present such a similarity to it as the special features of a hand—viz., the shortness mobility, and opposeableness of the thumb and the relative length of the other digits, would give it. Judging by this rule, it is as correct to speak of the "hind hand" of a monkey as of the "fore hand," though, forasmuch as both are employed in progression, it may, perhaps, be better to use some other term, such as "cheiropod" for the designation of the class, leaving the term "bimanous" to indicate the characteristic feature of man. The psychical qualities should not be omitted in considering the distinctive features of man; and the importance of the long, strong, firm great toe in this respect was pointed out. Some other peculiarities in the limbs and in the prostate gland of the Chimpanzee were described.

The paper will appear in the next number of the *Journal of Anatomy and Physiology*.

BELFAST BRANCH OF THE ROYAL MEDICAL BENEVOLENT FUND SOCIETY OF IRELAND.

THE annual meeting of the subscribers to the above Society was held on Wednesday, 6th inst., in No. 33, High-street. Owing to the great severity of the weather, the attendance was not so large as otherwise might have been expected. Amongst those present were—Dr. T. H. Purdon, the permanent president of this branch; Dr. Drennan, Dr. Moore (James), Dr. Browne, R.N.; Dr. Wilberforce Arnold, Dr. Whitaker, Dr. Bryce Smith, and Dr. Stewart. The chair was filled by Dr. T. H. Purdon.

The proceedings of the last annual meeting were read and confirmed, and signed by the chairman. A statement was made of the operations of the Society during the past year—these extending over the Counties of Antrim and Down, and according to which it appeared that, though as compared with former years, the proceeds in the aggregate had not fallen off, yet they were not as large in amount as might fairly have been anticipated, and as the peculiar and important objects of the Society so eminently deserved. The statement above referred to regretted that so many members of the profession afforded no assistance to the Society, and that so few of the wealthy gentry gave of their abundance in a cause in which their support and sympathy were naturally looked for, and whose countenance would so materially help on a society which had such strong claims on those outside of the profession.

The following subscriptions and donations were then reported as having been received:—The Marquis of Londonderry, £5; Dr. A. A. Stewart, staff assistant-surgeon, £2 4s.; Dr. Charles Mosse, staff surgeon, £1 1s.; Surgeon M'Bride, Gilford, 10s.; Assistant-Surgeon James Stewart, R.N., 10s.; Dr. T. H. Purdon, £25 (donation); do., £5 (annual subscription); Dr. W. Arnold, £2 2s.; Dr. Drennan, £1 1s.; Dr. B. Smith, 10s. 6d.; Dr. Moore (James), £1 1s.; Dr. Brown, R.N., £1 1s.; Dr. Doran, Kenmare, per Dr. T. H. Purdon, £1 1s.; Dr. Stewart, £5 (donation); do., (annual subscription); Dr. Patterson, £1 1s.

Dr. Moore having rendered very effective service during the past year, in obtaining subscriptions from the profession and others in the country, he was thanked heartily for the same, and requested to use his influence this year in the country parts as might suit his convenience, in promotion of the interests of the Society, which he kindly consented to do.

A committee of management for the ensuing year was appointed as follow—viz., Dr. Patterson, Dr. Drennan, Dr. Moore (James), Dr. Ferguson, Professor Cuming, M.D.; Dr. Wilberforce Arnold, and Dr. Whitaker for Belfast. Dr. Filson, Portaferry; Dr. Musgrave, Lisburne; Dr. Spearing, Antrim; Dr. Ross, Ballymena; Dr. Keown, R.N., Sydenham; Dr. David Taggart, Carrickfergus; and Dr. Malcomson, Banbridge, to represent the country localities of this branch.

Dr. Browne, R.N., was reappointed treasurer, and Dr. Stewart honorary secretary, and the thanks of the meeting voted to them for their past valuable services. On the motion of Dr. Stewart, seconded by Dr. W. Arnold, the marked thanks of the meeting were also cordially given to the conductors of the local newspaper press for their unvarying kindness, and readiness at all times in affording the benefit of their well-appreciated aid on behalf of the Society. Some further business having been transacted, Dr. T. H. Purdon was moved out of the chair, and Dr. Moore called thereto, when it was moved by Dr. Wilberforce Arnold, seconded by Dr. Drennan, and passed by acclamation, that the best thanks of the meeting be given to Dr. T. H. Purdon, the permanent president of this branch of the Society, for his dignified and able conduct in the chair to day, and for the continued warm interest he took in the promotion of its best interests, as well as for his always munificent contributions in carrying out the practical working of its humane and philanthropic objects.

The meeting then separated.

Correspondence.

CATHARRHAL INFLAMMATION OF THE TYMPANUM.

TO THE EDITOR OF THE MEDICAL PRESS AND CIRCULAR.

SIR,—In the MEDICAL PRESS AND CIRCULAR of last week I observe an extract from the *American Journal of Medical Science*, on Catarrhal Inflammation of the Cavity of the Tympanum in young persons, by Dr. Roosa. You remark on these cases that they prove very amenable to treatment. In this you are quite correct; but it is a singular fact that, it is the worst cases only that are cured. for the great majority, those not of a very severe character nevertheless ending often in confirmed deafness, are not subjected to treatment. except, perhaps, to home remedies of a doubtful or injurious character. Dr. Roosa is right in laying great stress on the importance of constitutional remedies, as is evident from the circumstance that the patients generally exhibit the strumous diathesis. Still, I am glad to find he does not overlook local treatment at the same time.

The deafness which attends these cases, almost from very commencement of the attack, will be far less likely to leave its traces behind if proper local, be combined with constitutional, remedies. Politsas' method of inflating the tympanic cavity is a step in the right direction; but as Dr. Roosa says, "at first the improvement only lasts for a short time," I hope he will take an early opportunity of using medicated spray, or, as it is termed, atomized lotion, in such cases. Weak solutions of nitrate of silver, sulphate of zinc, borax, lig. potassæ, &c. In the cases to which he refers as being benefitted by the vapour of iodine injected through Politsas' tube. I should like him to try solution of iodide of potassium, about four grains to the ounce, in the form of spray. Ten drops of such solution will be sufficient for one application to the cavity of the tympanum and Eustachian passages.—I am, &c., EDWARD BISHOP, M.D.

Parliamentary Intelligence.

HOUSE OF COMMONS.—Feb. 18th.

FLOGGING IN THE ARMY.

In reply to a question by Mr. Otway respecting the case of Robert Symes, whose death, according to some newspapers, had been hastened by flogging,

General Peel said—In consequence of the notice given by the hon. gentleman, I sent to Ireland for information on the facts, and I find that they are as follows:—Private Robert Sim, 74th Regiment, was tried by district court-martial on the 9th of January for an act of gross insubordination in having struck with his fist a sergeant of the regiment, and kicked him on the face when he was knocked down. He was sentenced to 365 days' imprisonment with hard labour (197 of which were remitted), and 50 lashes. The staff surgeon examined the man on three different occasions and pronounced him to be in a good state of health, and fit to undergo corporal punishment; he was flogged on the 14th of January, a staff assistant-surgeon being present at the parade. After punishment he was sent to the cells, where he was allowed bedding, &c., and seen daily by a medical officer. On the 29th of January (14 days afterwards) he was admitted into hospital suffering from fever; his back had nearly healed. On the next day erysipelas of the face and head commenced to set in, and he died on the 9th of February. The post-mortem examination showed that death was occasioned by congestion of the brain consequent on the erysipelas; his back had healed at the time of his death; he had always been a healthy man, but of bad character.

SCOTCH SANITARY LAWS.

Sir R. Anstruther asked the Secretary of State for the Home Department whether any measure was being prepared by the Lord Advocate for Scotland for the consolidation and application to Scotland of the various Sanitary and Nuisances Acts at present in operation; and whether he was about to bring in any measure for the more economical settlement of disputes arising in carrying out the Poor Law Act.

Mr. Walpole replied that there was a Bill in preparation for consolidating and amending the law relating to nuisances in Scotland, and he expected that it would be ready in a fortnight.

IMPORTATION OF CATTLE.

Mr. Eykyn asked the Vice-President of Committee of Council on Education whether any, and, if so, what measures had been adopted to prevent the importation from Holland and Germany of the carcases of animals infected by the cattle plague.

Mr. Corry said that the Privy Council were reluctant to prohibit the importation of articles used as food except under the apprehension of serious risk. It appeared to them, as at present advised, that there was no such amount of risk as would justify them in prohibiting importations of cattle.

Feb. 21.

THE METROPOLITAN POOR-LAW BILL.

The second reading of Mr. Hardy's Metropolitan Poor Bill was preceded by a long conversation, in the course of which Lord Enfield expressed a warm approval of the Bill, and indicated several points on which he thought it capable of improvement; and various details were criticized by Mr. Locke, Mr. Alderman Lawrence, Mr. Chambers, Mr. H. Lewis, Mr. Scourfield, Mr. Hibbert, and Mr. Alderman Salomons, in a spirit of general approval.

Mr. Villers welcomed the Bill as an opportune advance towards a fairer system of rating and more efficient management of the poor. In vindicating his own administration of the Poor-law Board, he showed that rules and regulations had long since been laid down, which, if attended to by the guardians, would have prevented those cases of neglect and abuse which had recently aroused public indignation. He argued in favour of an extension of the area of rating, showing how unfairly the present charge bore on certain classes of property, but was of opinion that the principle was hardly carried far enough in this Bill. He asked Mr. Hardy to explain why the scarlet-fever, small-pox, and lunatic patients only were to be placed on the general fund, while the other sick were retained on the local funds; and, while approving the establishment of dispensaries as a substantial benefit, he thought it a capricious arrangement to place them on the general fund. He advocated strongly the enlargement of the powers of the Poor-law Board, and that it should be made completely responsible for the proper treatment of the poor.

Mr. Hardy promised to take into consideration the numerous suggestions made, and, in replying in detail to various criticisms, he allowed that the Consolidated Orders of the Board constituted a valuable code for the management of the poor; but pointed out that the Board needed greater power to enforce them, not so much that guardians openly resisted them, but too many were in the habit of defeating them by dilatory and shuffling evasions. In answer to Mr. Villers's objection that the principle of enlarging the area of rating was not carried far enough, he said he had been actuated by practical considerations alone, with a full fore-knowledge that if he had proposed to equalize the rates throughout the whole metropolis, the Bill would have been met by a strenuous opposition, which would have been fatal to it. He intimated that he had in preparation a Bill for the more equitable assessment of the metropolis, which he would introduce if Mr. Hunt's general Bill for that purpose met with a favourable reception.

The Bill was then read a second time.

MEDICAL OBITUARY NOTICE.

DR. JOHN D. OWENS.

Our foreign advices record the death of this gentleman in November of last year, and though his name may not be generally known among our medical brethern in this country, yet his position in the colony where his life was spent, the work he performed, and the esteem in which he was held, give him a claim to a notice in our pages. Dr. Owens was an Englishman, and took his diploma from the Royal College of Surgeons in 1839, and his degree of M.D. in 1841. He is mentioned in Taylor's "Medical Jurisprudence," and in the *Surgical and Medical Journal*, for his successful performance of certain difficult operations. In 1850 he arrived in Australia, in charge of emigrants for Sidney and Adelaide, and high enconiums were passed upon him for his skilful attention to the persons under his charge. After a visit to America, he returned again to Australia, and was one of the first who left Forest Creek for Bendigo, where he commenced the practice of his profession. Soon afterwards he went to the Ovens goldfields. At these places he was associated with the diggers, and devoted his energies in every way to promote their interests. This involved him in politics, and brought out his name before the various parties, as well as the authorities of the colony. Being nominated by Sir Charles Hotham, he obtained a seat in the Legislature, where the principles he contended for, and the men whose cause he had espoused, both received recognition through his influence. His attention was frequently diverted from his profession by his political engagements, but he devoted himself to it in various places, and usually obtained a lucrative practice. At length, after different changes in his professional and political life, he turned his attention once more to Bendigo and medicine. For some time he was Officer of Health at the Heads, during the absence in England of Dr. Robertson, and was subequently appointed Secretary of the Royal Commission on the working of the Publicans' Act, to the duties of which office he devoted his unremitting attention, up to the time of his

death. This took place suddenly. On Monday, the 26th November, he complained of being poorly, and procured some medicine from Mr. Johnson the chemist. In the evening he went home, and his housekeeper provided him with some refreshment, of which he partook apparently in his usual health. A few minutes afterwards he summoned the housekeeper, and directed her to call in Mr. Johnson, which she did. On her return, in about ten minutes, she found that Dr. Owens was no more. An inquest was held, when the jury, in accordance with the medical evidence, returned a verdict of "death from congestive apoplexy." His death is deeply regretted by all who had the pleasure of his acquaintance, and the estimation in which he was held will be seen by the following quotation :—

"Dr. Owen's services were such as could never fade out of the memory of his fellow-citizens, and seclusion never separated him from the social and political movements he had been foremost in originating. Not many were aware of the intellectual energy and cultivation which accompanied a manner so singularly modest and unobtrusive; but his frank, kindly disposition, his sincerity and disinterestedness, were universally acknowledged. Firm, and even fierce enough, when contending against some great public wrong, he never forgot the courtesy of the gentleman in the fervour of the politician; and although prominent in the most exciting debates of our Legislature, we believe he never inflicted a wound upon the feelings of an adversary. There must be something peculiarly loveable in the nature of a man who passes through the turmoil of political life without making personal enemies. This is literally true of Dr. Owens, whose epitaph might fitly be, that he never made an enemy, or alienated a friend."

ARMY MEDICAL EXAMINATION PAPERS.

CHELSEA HOSPITAL, 1867.

ANATOMY AND PHYSIOLOGY.—MR. BUSK.

1. Give the dissection required to expose the genio-hyoglossus muscle, noticing all the parts brought into view, and especially their relations to the muscle; and describe particularly the relations of the sublingual and submaxillary glands, and of their ducts.

2. Describe the muscles of the larynx—their attachments, relations to nerves and vessels, and functions; and give an account of the mechanism of the voice.

3. Describe the position, precise relations, and structure of the duodenum and pancreas, together with their physiological functions.

4. Give the average length in the adult of the following parts, and describe the relations of each :—

Œsophagus.
Left bronchus.
Biliary ducts external to the liver.
Ureter.
Vas deferens.

5. What are the immediate and remote effects of the division of a lateral half of the spinal cord in the dorsal region?

SURGERY.—MR. PRESCOTT HEWITT.

1. Enumerate the muscles of the forearm which would be paralysed supposing the musculo-spiral nerve to have been cut across on the outer side of the arm just above the supinator radii longus.

2. Up to what period of life can a traumatic separation of the epiphysis occur at the lower end of the femur, and what are the morbid appearances, diagnosis, prognosis, and treatment in such cases?

3. The morbid anatomy, diagnosis, prognosis, and treatment of syphilitic disease of the testicle.

4. The morbid anatomy, diagnosis, and treatment of alveolar abscess.

5. Give a list of the various instruments which might be wanted in an operation for trephining a deep-seated abscess in the head of the tibia, and describe particularly the trephine used in such cases.

MEDICINE.—DR. PARKES.

1. Describe the forms of paralysis of motion which arise—

From causes within the cranium.
From causes within the spinal column.
From causes external to the cranium and cord.

2. Enumerate the exanthemata, and give the distinguishing characters of each disease.

3. Give the physical signs of aortic obstruction and aortic regurgitation and obstruction, and state what assistance to diagnosis, if any, is given by the sphygmograph.

4. Give your treatment for the following diseases :—

Erysipelas of the head and face.
Whooping-cough.
Tonsillitis with great swelling.
Acute eczema of the face in children.

5. What are the normal dimensions of the adult female pelvis? What size would you consider too small for natural delivery of a full-grown child, and what would you do in the case of a woman with a contracted pelvis becoming pregnant?

6 What do you mean by a narcotic? Enumerate the three principal narcotics, and give the chief pharmacopœal preparations of each.

LEGAL INTELLIGENCE.

COURT OF QUEEN'S BENCH, GUILDHALL—FEB. 18.

(Sittings at Nisi Prius, before the Lord Chief Justice and a Common Jury.)

CALTHORPE *v.* THE GREAT EASTERN RAILWAY COMPANY.

THIS was an action for a serious injury sustained by a passenger while travelling on the company's line.

Mr. Coleridge, Sir George Honyman, and Mr. Beasley were for the plaintiff; the Solicitor-General (Sir John Karslake), Mr. Serjeant Ballantine, and Mr. Philbrick were for the company.

The plaintiff, Mr. Calthorpe, is a gentleman who farms a large quantity of land in Lincolnshire, on which between £8000 and £9000 is invested, and which he personally managed. He is in his 47th year, is married, and has six children, of whom the eldest is nine or ten years of age. At the time of the accident he was hale, hearty, and athletic, and of active habits. On Saturday, July 1, 1865, he was a passenger on the line from Ely to Lowestoft, and an accident occurred which, it was now admitted (though at first disputed), arose from the negligence of the company's servants, and the result of which was that the carriage was upset, and the passengers thrown violently about. The plaintiff had been attended not only by his own medical man, but by Mr. Erichsen and Dr. Russell Reynolds. The company had appealed to Sir William Fergusson, Mr. Skey, Dr. Bennett, and Mr. Coulson, all of whom had examined him on several occasions, and who were in attendance to-day to give evidence.

Mr. Coleridge, in opening the case, described it as another of those unhappy railway cases which were but too frequent, and one of a peculiarly painful character—a case in which a man in the prime of life, married, and a father of a family, and their sole dependance and support, had been, it was to be feared, utterly destroyed, and unfitted for life for the only occupation with which he was acquainted.

The plaintiff was called as a witness, and had evidently been a very fine man, but it was obvious that he could with difficulty stand or crawl into the box, and his examination was made as short as possible. The material facts are already stated.

After the plaintiff had given his evidence, Mr. Webster, Q.C., who is connected with him by marriage, and the Rev. Mr. Spencer, the vicar of his parish, gave evidence as to his former health and strength, and his present unhappy condition. Mr. Webster said he had known him thirty years, and that he was a man of singular energy and activity, who had entirely, indeed, made himself by his own exertions. He had never known a man of finer *physique*, but he was now "utterly broken down," and could do nothing. The medical men fully supported this view, and said it would be long before he resumed active life.

The Solicitor-General, on the part of the company, said they by no means denied that it was a serious case, and that it had been most truthfully told, but they were led to believe and hope that it might turn out not to be so hopeless as had been represented.

Sir W. Fergusson, Mr. Coulson, and Mr. Skey were called in support of this view, all of them having seen the plaintiff lately. They, however, greatly differed in their opinion. Mr. Coulson feeling certain that the plaintiff would be restored in twelve months; but Sir W. Fergusson doubted whether he would ever entirely be restored.

The Lord Chief Justice, in summing up, said where the medical evidence was so evenly balanced, perhaps it was better to err, if at all, on the side of the party who had sustained the injury. The jury gave a verdict for £7000.

AN UNQUALIFIED PRACTITIONER.

At Worship-street Police Court, Mr. Edward Lucien Meall, of 33, Pollard's-road, Bethnal-green-road, was summoned at the instance of Dr. Botherton, of Bethnal-green-road, and Mr. Colden, resident medical officer of the Queen Adelaide Dispensary, Bethnal-green, for falsely representing himself to be a legally qualified medical practitioner. Mr. Poland, barrister, prosecuted.

The first witness, Mr. Edward Colden, stated that he is a member of the Royal College of Surgeons of England and resident medical officer of the Queen Adelaide Dispensary, Bethnal-green-road. The defendant resides a few doors from the dispensary, and on the door of his house is a brass plate, bearing the inscription, "Mr. Meall, surgeon and accoucheur." In the autumn of last year the defendant called upon him and asked him if he wanted a *locum tenens*. The witness replied that he did, and asked defendant the remuneration he required. The defendant said 30s. or £2 2s., on which the witness said the terms were so high that he presumed the defendant was a legally qualified practitioner. The defendant said that he was not at present, but he hoped to be, and the witness then said that, not being a registered surgeon, he could not employ him. The duties required were dispensing for three hours in the day.

In cross-examination the witness said that when the defendant called on him he did not represent himself to be a registered practitioner. The witness offered the defendant 25s. a week before he discovered his disqualification, but they parted in consequence of the illegality of defendant's course of proceeding, and not because of the amount of salary.

Elizabeth Short, the keeper of a coffee-house in the Bethnal-green-road, said that, being ill in November last, she was attended by the defendant, who had for some time past frequented her house to see periodicals. She was supplied with medicine, for which she was charged 1s. 6d. per bottle. He saw her about seven or eight times. Her servant usually fetched the medicine from defendant's house, but on one occasion he brought it in his pocket. It was not from seeing the plate on defendant's door she had recourse to his advice. She went to defendant's house once, when he prescribed and gave her medicine. She believed him to be a surgeon.

In cross-examination the witness said she was not aware that the defendant had ever represented himself to be a properly qualified practitioner. She believed he was, as he had attended midwifery cases.

Mrs. Ward, of 2, Gurnett-place, Bethnal-green, said that she went to the defendant's house in the end of January, and asked him why he had not come the night before to see her husband when she sent her daughter to him. The defendant asked her what was the matter, and she told him that her husband was in a consumption. The defendant said, "What's the use of attending for consumption?" and then asked for a guinea as his attendance fee. She said she could not afford it. He then said that he attended some free of charge when recommended by the clergyman. He told her to go to Dr. Jarvis, who would attend her husband for 1s. or 1s. 6d. She had been recommended to the defendant by Mr. Colden.

In cross-examination the witness said she applied to the defendant as a last resource, as her husband was very ill. She was not told by Mr. Colden that it was a trap.

Mr. Edward Trimmer, Secretary to the Royal College of Surgeons, was called to prove that the defendant was not a member of the college, and therefore not legally qualified. The defendant contended that having practised as a surgeon before the passing of the Medical Registration Act, he did not come within the meaning of the Statute. He had been employed by medical men, and had invariably acquitted himself to their satisfaction.

Mr. Newton said that he regarded the case as proved, but, as there was no evidence to show that the defendant had made money by it, the penalty would be mitigated to £5 and costs.

The defendant was understood to say that he should appeal against the magistrate's decision.

Alleged Death of a Butcher from Cattle Plague.—A butcher of Liege has just died in consequence of a casual inoculation of the virus of the cattle disease. He had been engaged in slaughtering the infected animals at Hasselet, and in cutting up a carcase had accidentally scratched his hand, which swelled up with such rapidity as to render medical aid of no avail.

Medical News.

College of Surgeons of England.—A special meeting of the Council of the College of Surgeons was summoned on Thursday last to consider a motion to the effect that Mr. South, and Mr. Luke should cease to be members of the Examining Board. The motion was proposed by Mr. Charles Hawkins, and seconded by Sir William Fergusson; but in a full meeting of twenty-four members, only six were in favour of thus carrying into effect the charter of the College. The motion was of course lost.

The Prevention of Infanticide.—Mr. Walpole's Bill for amending the law relating to murder contains fourteen clauses, of which six are devoted to the protection of new-born children. Wilful injury to a child during its birth or within seven days thereafter becomes, under the Bill, a felony punishable with penal servitude for any term not exceeding ten nor less than five years, or with imprisonment for any term not exceeding two years, with or without hard labour or solitary confinement. Proof that the child was completely born alive is dispensed with. The deliberate murder of a child remains a capital offence; but it is open to a jury to acquit a person of the murder of a child, and to return a verdict of "guilty of wilful injury," which carries the punishment of penal servitude or imprisonment. The proviso contained in the Act 24 and 25 Vict., c. 100, s. 60, authorising juries, on an indictment for the murder of a child, to find the accused guilty of the offence of endeavouring to conceal the birth of the child, is repealed by the Bill.

The Pharmacy Act.—A deputation from the chemists and druggists, not members of the Pharmaceutical Society, lately waited upon the Council of the latter body to endeavour to arrange the heads of a plan for the future extension of the Pharmacy Act of 1852, and to express the views of the trade at a meeting which was held some time since, to consider certain suggestions forwarded by the Pharmaceutical Society to the Home Office: the object really being to compel all persons—who may hereafter assume the title of chemist and druggist, or keep open shop for dispensing physicians' and surgeons' prescriptions, or vending, dispensing, or compounding certain dangerous drugs to be enumerated in a schedule—to undergo an examination and obtain a certificate of qualification. There was no difference of opinion between the Society and those who are not members of it on this, the main point of the suggestions, but there was a difference as to the future constitution of the Council of the Pharmaceutical Society. Chemists and druggists in business at the time of the passing of the proposed Bill will be left entirely unaffected, but it would be provided that a voluntary registration as chemists and druggists should be open to them, and that those who availed themselves thereof should be eligible for admission to membership of the Pharmaceutical Society. It was originally proposed in the suggestions that the Council should consist entirely of pharmaceutical chemists, but on Tuesday it was arranged that chemists and druggists, being members as above described, should also be eligible for the Council. The Council, however, was not to contain more than a certain proportion of such members agreed upon.

The Atlantic Cable.—The calculation of the longitude between England and America has, hitherto, depended upon the chronometric expeditions instituted by the Coast Survey during the years of 1849-51 and 1855. Fifty chronometers were transported three times in each direction across the Atlantic. The probable error of the result of these expeditions was 19-100ths of a second. The value thus obtained, though for all practical purposes sufficiently precise, is not so for the necessities of astronomical science in its present refined state. When, therefore, the success of the cable provided telegraphic Transatlantic connexion with England, parties of the Coast Survey were formed, under the direction of Dr. B. A. Gould, to take advantage of this means of obtaining a value more precise than that furnished by the chronometric expeditions, allusion to which has been made. The peculiarities in the methods and apparatus employed in working the cable render the process of determining the longitude by its means different in many respects from that by the land telegraph lines. New obstacles, which made success exceedingly doubtful, were to be surmounted, and new sources of error eliminated; but, thanks to the genius, experience and perseverance

of Dr. Gould, these have been overcome, and results of remarkable precision elicited. The probable error of the resulting longitude is about four hundreths of a second. Perhaps it will give the reader a clearer idea of the nicety implied in this by stating that a distance of about 1900 miles has been measured, and that the measure is not probably more than 40 feet from the truth. The time required for a signal to pass through the cable has been discovered with a still greater precision to be 31-100ths of a second, which is probably not in error by one hundreth of a second. This is equivalent to a velocity of 6020 miles a second, and is notably less than the velocity of the electric fluid upon land lines, which numerous observations have shown to average 16,000 miles a second.—*Boston Transcript.*

Notices to Correspondents.

Communications to the London Editor should be addressed to 20, King William-street, Strand; to the Edinburgh Editor, at Maclachlan and Stewart's, South Bridge; and to the Dublin Editor, at 3, Lincoln-place.

All Contributions are attentively considered, and unaccepted MSS. are returned on receipt of stamps for postage; but the Editors cannot be responsible for any accidental loss, nor can MSS. or replies be delivered on personal application.

The Professorship of Botany at the Royal College of Surgeons of Ireland.—In our observations on this subject last week we inadvertently omitted to mention that Dr. Minchin had distinguished himself as a prizeman in Botany.

Assumption of Medical Titles.—A Correspondent calls our attention to addresses, which appear in the *Cork Examiner* for the 18th inst., from two gentlemen, candidates for the office of Physician to the Fever Hospital. One of these gentlemen signs himself M.D., &c., &c., although he does not appear in either the "Medical Register" or the "Directory" at all. This gentleman, on a former occasion, signed himself a Licentiate of the Royal College of Physicians of Edinburgh and an Apothecary, and we are not aware that he has since obtained any further qualification. If so, the appropriation of the letters M.D. are a most unwarrantable assumption of a dignity to which there exists no right whatever, and should, as we think, furnish a very conclusive argument in favour of the candidate who really possesses the qualifications which he appends to his name.

MEDICAL APPOINTMENTS.

Beigel, H., M.D., has been elected Honorary Physician to the Farringdon Dispensary.

Coleman, A., M.R.C.S.E., Lecturer on Dental Surgery at St. Bartholomew's Hospital, has been appointed Dental Surgeon to the Hospital, vice S. J. Tracy, M.R.C.S.E., resigned.

Cooper, H., M.R.C.S.E., has been appointed Medical Officer for District No. 1 of the Cricklade and Wootton Bassett Union, Wilts, vice G. V. Cooper, M.R.C.S.E., resigned.

Dandy, T., M.R.C.S.E., has been appointed Medical Officer for District No. 4 of the Ormskirk Union, Lancashire, vice C. Dandy, M.R.C.S.E., deceased.

Furnivall, C. H., L.S.A.L., has been appointed Resident House-Physician to the Westminster Hospital, vice C. F. Oxley, M.R.C.S.E., whose appointment has expired.

Harmer, W. M., M.R.C.P.Ed., has been appointed Medical Officer for the Hurst-Green District of the Ticehurst Union, Sussex.

Haslewood, J. A., M.R.C.S.E., has been appointed Medical Officer for the Barton District of the Darlington Union, Durham, vice W. Haslewood, M.D., deceased.

Hislop, G. B., L.F.P.&S.Glas., has been appointed Medical Officer for the Longbenton District of the Tynemouth Union, Northumberland, vice F. W. Wilson, M.R.C.S.E.

Jones, R. A., M.R.C.S.E., has been appointed Surgeon to the County Gaol of Carnarvon, vice R. Jones, M.R.C.S.E., deceased.

M'Carthy, J., L.R.C.P.Ed., has been appointed Resident Medical and Surgical Assistant at St. Mary's Hospital, Manchester.

Meyrick, Ed. W. W., has been appointed Junior House-Surgeon to the Ardwick and Ancoats Dispensary, Manchester.

Neal, Dr. James, has been elected Honorary Surgeon to the Birmingham Lying-in Hospital.

Paterson, George, K.H., L.R.C.P.E. (Exam.), L.R.C.S.E., Assistant-Surgeon, has been appointed Surgeon 1st Administrative Battalion of Perthshire Rifle Volunteers.

Pope, R. H., L.R.C.P.Ed., has been appointed Medical Officer to the Workhouse and Fever Hospital of the Donegal Union, and Medical Officer and Public Vaccinator for the Donegal Dispensary District of the same Union, vice J. M'Crae, M.D., resigned.

Sargent, G. P., M.D., has been appointed Medical Officer for the Wickford District of the Billericay Union, Essex, and for District No. 5 of the Chelmsford Union, vice W. L. Le Sage, M.R.C.S.E., resigned.

Siddall, G. O., M.R.C.S.E., has been appointed Medical Officer for the Alfreton District of the Belper Union, Derbyshire, vice Spencer, deceased.

Thomason, R., M.R.C.S.E., has been appointed Visiting Surgeon to the Hereford General Infirmary, vice T. Cam, F.R.C.S.E., resigned.

Trimmer, F., M.R.C.S.E., has been appointed Medical Officer and Public Vaccinator for District No. 1 and the Workhouse of the Okehampton Union, vice Thos. Gambier, M.R.C.S.E., resigned.

MEDICAL DIARY OF THE WEEK.

Wednesday Feb. 27.

Royal College of Surgeons of England.—4 p.m. Prof. Huxley, "On the Osteology and Dentition of the Sauropsida, or Reptiles and Birds."

Royal College of Physicians.—5 p.m. Gulstonian Lectures: Dr Southey, "On the Nature and Affinities of Tubercle."

Hunterian Society.—7½ p.m. Council.—8 p.m. Dr. Braxton Hicks, "On the Treatment of Cicatrices of the Vagina, with Remarks."

Society for the Encouragement of Arts, Manufactures, and Commerce. 8 p.m.

Thursday, Feb. 28.

Royal Institution.—3 p.m. Professor Tyndall, "On Vibratory Motion and Sound."

Friday, March 1.

Royal College of Surgeons of England.—4 p.m. Professor Huxley, "On the Osteology and Dentition of the Sauropsida, or Reptiles and Birds."

Royal College of Physicians.—5 p.m. Gulstonian Lectures: Dr Southey, "On the Nature and Affinities of Tubercle."

Royal Institution.—8 a.m. Captain V. D. Majendie, "On Breech-loading Small Arms."

Saturday, March 2.

Royal Institution.—3 p.m. G. A. Macfarren, Esq., "On Harmony."

BOOKS, &c., RECEIVED.

A Practical Treatise on Acupressure. By Drs. Pirrie and Keith.

The Story of the Truck. By W. Reid.

Observations on the Comparative Advantages of affording Obstetric Attendance on Poor Women in Lying-in Hospitals, and in their own Homes. By D. Phelan, M.R.C.S.

Observations on the Pulse of Typhus. By T. W. Grimshaw.

Physiological Remarks upon the Causes of Consumption. By Valentine Duke, M.D.

Births, Marriages, and Deaths.

Announcements are inserted without charge, and must in all cases be authenticated with the signature of the sender.

BIRTHS.

Smith.—On the 20th inst., at 10, Pump-street, Londonderry, the wife of Edward Smith, M.B.T.C.D., of a son.

Smith.—On the 25th inst., at Lifford, Co. Donegal, the wife of Charles Smith, M.D., of a son.

Griffith.—On the 9th inst., the wife of S. C. Griffith, M.D., Wimpole-street, Cavendish-square, of a son.

Evans.—On the 11th inst., at Cheshunt, Herts, the wife of N. Evans, M.D., of a son.

Gooding.—On the 11th inst., at Cheltenham, the wife of J. C. Gooding, M.D., of a daughter.

Coates.—On the 12th inst., at Chapel-street, Devonport, the wife of Matthew Coates, M.R.C.S.E., Assistant-Surgeon H.M.'s Ship "Caledonia," of a daughter.

Ure.—On the 13th inst., at the Minister-yard, York, the wife of John Ure, M.D., of a son.

Eames.—On the 14th inst., at Plymouth, the wife of Dr Eames, H.M.'s Ship "Gladiator," of a daughter.

Fergusson.—On the 17th inst., at Ailsa Cottage, Girvan, Ayrshire, the wife of Alexander Fergusson, L.R.C.P.Ed., of a son.

Fotherby.—On the 19th inst., at Trinity-square, Tower, the wife of Henry J. Fotherby, M.B., of a daughter.

MARRIAGES.

Gange—Whitechurch.—On the 12th inst., at Harlton, Cambridgeshire, F. A. Gange, M.D., of Faversham, Kent, to Susan, daughter of W. Whitechurch, Esq.

Metcalfe—Gardiner.—On the 14th inst., at Bishop's Lydeard, Somerset, Fenwick Metcalfe, Esq., son of Charles Metcalfe, Esq., of Inglethorpe Hall, Enneth, Norfolk, to Augusta Katharine, third daughther of the late Henry Gardiner, Esq., Madras Civil Service.

Fawssett—Boucher.—On the 14th inst. Fulbourn, Frederick Fawssett M.D., of Wisbech, to Ellen Eliza, daughter of the late C. Boucher Esq., of Wisbech.

DEATHS.

Jones.—On the 20th inst., suddenly, at the residence of his father Stone House, Wellington, Salop, Dr. Edward P. Jones, L.R.C.P., late of Waterloo, near Liverpool, aged, 28.

Martin.—On the 12th inst., T. Martin, F.R.C.S.E., of Reigate, Surrey, aged 87.

Day.—On the 14th inst., H.G. Day, M.R.C.S.E., of Isleworth, aged 58.

Powell.—On the 14th inst., D. Powell, M.R.C.S.E., of Amwell-street, Pentonville, aged 63.

Dyer.—On the 14th inst., Thos. Dyer, M.D., of Forest-hill, Medical Officer to the London, Brighton, and South Coast Railway Company, aged 57.

Barlow.—On the 20th inst., at Shakspeare-street, Chorlton-on-Medlock, Manchester, after a long and painful illness, Joshua Barlow M.D., aged 47.

Oration.

THE ANNUAL ORATION FOR 1867,

DELIVERED AT THE

HUNTERIAN SOCIETY,

HELD AT THE LONDON INSTITUTION.

By WILLIAM SEDGWICK SAUNDERS, M.D.,

CONSULTING-PHYSICIAN TO THE SCINDE AND DELHI, EAST INDIAN, BOMBAY AND BARODA, GREAT SOUTHERN OF INDIA AND CALCUTTA, AND SOUTH-EASTERN RAILWAY COMPANIES; VICE-PRESIDENT HUNTERIAN SOCIETY; TREASURER TO NEW SYDENHAM SOCIETY; MEDICAL EXAMINER TO MUTUAL LIFE OFFICE, ETC., ETC.

Mr. President, I purpose to devote the time, which your indulgence has placed at my disposal this evening, to laying before you the results of some inquiries into the origin and history of medicine, and the medical profession; regarding the subject rather from a *social* than a *scientific* point of view.

My scheme will introduce you to some of your old acquaintances; not for instruction, but to remind you of those passages in their lives which may have been pressed out of your memories by the sterner realities of professional duties.

An inquiry into the origin of medicine must begin with the history of *man* himself, since *pain* and *death* are the inevitable conditions of his existence, and the desire to mitigate the *former*, and *postpone* the triumphs of the *latter* arose *from*, and has kept pace *with*, the development of the various diseases to which time and circumstances have subjected him. The *primal man*, we know, was created pure and innocent, free from liability to pain, and possessed of unmixed capacity for the enjoyment of the pleasures that surrounded him; glowing with health, and with every emotion redolent of new delight. At sight of him,

> Each hill gave sign of gratulation,
> Joyous the birds; fresh gales and gentle airs
> Whispered the woods; and from their wings
> Flung rose, flung odours from the spicy shrubs:—

Apprehension of the miseries to which his progeny were doomed, would have *marred* this happiness; hence his ignorance of evil, and his belief that the felicity he enjoyed would be as *permanent* as it was *perfect*. But our business is with man in his *actual* condition; the sport

> "Of ghastly spasm, and raking torture qualms
> Of heart-sick agony—of moping melancholy,
> And moon-struck madness."

Undertaking to examine the subject *ab initio*, we must take into account the *sources* of our information, and as our knowledge of every event *antecedent to the discovery of writing* must have been transmitted by oral or traditional agencies, we have to settle, in some degree, how far such evidence is worthy of credence.

According to popular belief, the Noahic flood destroyed the whole human race, with the exception of *Noah* and his family; who were therefore the sole depositories of the traditions of the events which had occurred between the time of Adam and themselves. The great longevity of these antediluvian fathers made this oral transmission easy; and we know, that the sons of Noah lived to see the birth of Abraham, whom, as the founder of circumcision, we claim as the first operative surgeon on record.

In dealing with dates, I adopt the commonly accepted chronology, unmoved by those refined speculations so much in favour at this time.

I begin with Moses, for whatever evidence may be urged upon us in the shape of marbles, or monument, claiming an antiquity anterior to the advent of the Jewish law-giver, it is a positive and unimpeachable fact, that no *writings* are in existence, which in point of age reach within many centuries of the Pentateuch; indeed, as we shall presently see, the oldest of the Greek writers are, in comparison with Moses, but as the children of yesterday.

The five books of Moses were written 1500 years before Christ. Hesiod, the father of Greek literature, flourished 500 years later; and Homer, the next in succession, nearly a century after Hesiod.

Herodotus places Homer 400 years before himself; thus bringing the "father of history," as he is termed by Cicero, to about 500 years before the advent of our Saviour, so that the difference between the author of the Pentateuch and the oldest Greek historian cannot be much less than 1000 years.

I pass over the pretended antiquity of the Chinese and Parsis records: these have been disposed of very satisfactorily, and however much *fancy* may dwell upon the losses to literature inflicted by the Caliph Omar, when he destroyed the Alexandrian library, in the year 640, a very little reflection will convince us that as these treasures, real or assumed, had been ransacked for ages, by the brightest spirits of *Greece* and *Rome*, everything worthy of note has been handed down to us.

The *learned* talk about the writings of the Assyrians, the Babylonians, and the Egyptians; but they do not produce a single scrap of tangible evidence in support of these pretensions.

It may, however, be contended, that although there are no *writings* extant, *traditional* evidence is very strong; and this establishes a high antiquity for Lycurgus, who lived 900 years before the Christian era. The more, therefore, we inquire, the stronger the proof becomes, that Moses as a lawgiver flourished 600 years before the highest claimant to our veneration on the grounds of primitiveness; and thus we are entitled to assume that the Greek legislator took much that is excellent, in the laws ascribed to him, from his Jewish predecessor.

Lycurgus lived about the time that Shishak, king of Egypt, destroyed the temple of Solomon, and carried away many captives: it is therefore no very extravagant supposition, that the pentateuch of Moses was *known* to the great lawgiver. During the peaceful reign of king Solomon, the intercourse between the Jews and the Egyptians was frequent and extensive, the great monarch needing the assistance of skilful artificers for the construction of the "Temple of Jerusalem," broke down that barrier of exclusiveness that had previously isolated his people.

Now the *learned* of that day were seekers after wisdom wherever it was to be found; and moreover, as the fame of Solomon was coextensive with the then existing world, so acute an observer as the *founder* of the Grecian law could not fail to use the materials which the wide spread knowledge of the Jewish king's sayings and doings had placed within his reach.

Every Jew was required to read the law, *or hear it read*, once a year—each individual therefore became a *living depository* of its truths, and, consequently, a competent *teacher* of those who might desire to be instructed in such matters.

Moses then comes before us as the first *writer*, and the first *lawgiver;* and we shall now proceed to show that to these, he added the still *greater* distinction of being the first *physician*, and promulgator of sanitary precautions.

At present, however, I will not further intrude upon your patience, but leaving his claims where I have placed them, pass on to the consideration of the character of the laws themselves;—and here we arrive at a body of enactments so excellent, so well adapted, not only to the requirements of a nomadic and pastoral people wandering in a wild country, but to that *same* people when they subsequently became dwellers in cities, and suffered all the encumbrances of a more advanced civilization, that our admiration is unbounded. *Moses* made laws for *all* times and for *all* communites, *general* as well as *particular*, reaching the *nation* through every individual member thereof; his rules for the preservation of health embraced the consideration of personal cleanliness enforced as a *religious* obligation in order that he might thereby enlist the unvarying co-operation of the priesthood.

In a climate incentive to animal enjoyments he placed strict barriers for the preservation of *chastity*, and *decreed* that matters relating to sexual intercourse should be under the surveillance of the priest; directions were also given

to the *menstruous* woman, and for her conduct during *pregnancy* and in *childbed*. The ordinance of circumcision was devised not alone for ablutionary purposes, but for *other well understood* objects conducive to purity. Further, it was directed how the man should order himself in affections of the virile organs ; and more emphatically, what he was bound to observe when the terrible *leprosy* afflicted him. In such a calamity he was compelled to withdraw from his house, to be separated from society, and present himself to the priest at various periods during the progress of the disease ; also to remain in a cheerless exclusion, where, *if by chance*, any unwary passenger came in sight, he was commanded to cry aloud, *unclean ! unclean !* When convalescence and health returned, the *priest* pronounced him cured of his leprosy, and he was then permitted to return to his home ; but if the leprosy was supposed to cling to the *habitation*, *that*, too, was subjected to isolation, and in some instances to *total* destruction.

The *same precautions* obtain in our own times, although nearly 3400 years have elapsed since they were first insisted upon by Moses.

Thus, we are told by Dr. Thompson, an eminent American writer on the "Holy Land" (where he resided many years), that lepers are everywhere regarded as unclean at Jerusalem (where there is always a considerble number of them), and in which place a separate quarter is assigned to them, to which they are rigidly confined. Dr. Thompson says : "I have seen them cast out of the villages where they resided, and no healthy person would touch them, eat with them, or use any of their clothes or utensils, and even the Arab tent dwellers cast them out of camp. The leper beggars stand apart, and never attempt to touch you, even as it was in the time of the Saviour, 'when the ten lepers stood afar off and lifted up their voice of entreaty.'"

The same writer furnishes us with the following graphic description, which, as coming from an *eye witness*, we have deemed worthy of notice :—

"Sauntering down the Jaffa road, on my way to the Holy City, I was startled by the sudden apparition of a crowd of beggars, *sans* eyes, *sans* nose, *sans* hair, *sans* everything ; they held up their *handless arms*, unearthly sounds gurgled through throats *without palates*, and, in a word, I stood horrified, when, for the first time, I found myself *face to face* with a leper." He then goes on to say : "For many years I have sought to get at the mystery of its origin, but neither books nor learned physicians have thrown any light upon it. I have suspected that this remorseless enemy originates in some self-propagating animalculæ, and thus I can conceive the *possibility* of the contagion reaching the walls of a dwelling. No one has spoken with *authority*, as to what it *proceeds* from or *how* it is generated.

"New born babes of leprous parents are often as pretty and healthy in appearance as other children, but the '*scab*' comes on by degrees, the hair falls off, joint after joint of the fingers and toes shrink up, the gums are absorbed, and the teeth fall out and disappear ; the nose, the eyes, the palate are slowly consumed, and finally the wretched victim sinks into the earth under a disease beyond the control of medicine, which cannot even mitigate its tortures.

"To my mind there is no conceivable manifestation of Divine power more triumphantly confirmatory of Christ's divinity than the cleansing of a leper with a word."*

The initiatory rite of circumcision was, by Divine command, first performed by Abraham in the year of the world, 2107 or about 1897 years before Christ :—At the age of 99 years, Abraham, together with his son Ishmael and all his dependents were circumcised.

Ishmael at this time was thirteen years old, and, as we are informed by Josephus, was the founder of the Arabian nation, who to this day do not circumcise until after the thirteenth year.

Isaac, the child of promise, the heir who was to carry on the race of the partriarch, was circumcised on the eighth day after his birth, and this, among the Hebrews, became a law, and a statute for ever.

One of the tapestries at Hampton Court, in the time of "Holbein," represents the operation being performed upon Isaac, with what appears to be a knife made of stone, which was the instrument used for many ages for this purpose.

By the kindness of my friend, the Rev. William Sparrow Simpson, the learned Librarian and Minor Canon of Saint Paul's Cathedral, I am enabled to show you some of these knives of stone ; and further evidence of the employment of such implements will be found in Exodus 4th chapter and 25th verse, where it is written—"Then Zipporah took a sharp stone and cut off the foreskin of her son and cast it at his (Moses) feet."*

Some writers believe that the practice of circumcision existed for ages amongst the Heathens before the time of Abraham, whilst others have not hesitated to date its origin as far back as our first father, asserting that Adam was taught by the angel Gabriel to satisfy an oath he had made to cut off that flesh, which after his fall had rebelled against his spirit.

Much has been written with regard to the comparative *antiquity* of this custom among the Egyptians and Ethiopians ; a point upon which the erudite Herodotus leaves us in doubt.

Circumcision of *both* sexes exists amongst the Abyssinians, Nubians, Egyptians (both ancient and modern), Hottentots, and probably many other nations. But in Turkey, Persia, and in the South Sea Islands, and those of the Indian Seas, the practice is confined to the *male* sex. The Mohammedans adopt the rite of circumcision, and Mahomet himself was circumcised, although no mention is made of the fact in the "Koran."

Doubtless, the so-called circumcision of women, as it is practised in some countries, is a modification of what *we* understand by the term, and involves structures other than the clitoris or nymphæ ; and it is equally true that the custom is adopted by many races totally irrespective of any religious significance.

Sonnini de Manoncourt, a distinguished traveller and naturalist of the eighteenth century "having examined a young girl of Egyptian origin, about eight years old, found a thick, flabby, and fleshy excrescence, covered with skin, which grew above the commissure of the labia, and hung down half an inch, resembling in size and shape the caruncle pendent from the bill of a turkey cock."

Conditions of a similar nature are said to exist among the women of the interior of Africa, and are probably due to climatic influences, but the more common forms of disease are those of simple hypertrophy of the external parts

* The contagiousness of Leprosy was held in universal belief up to the seventeenth century, when certain writers on the subject began to question the validity of a doctrine which had been handed down to them through successive ages, by all the early observers of the Jewish, Egyptian, Arabian, Grecian, and Hindoo countries, and the view then advanced has been confirmed by the report of the Committee recently appointed by the College of Physicians, who states that :—"The all but unanimous conviction of the most experienced observers in different parts of the world, is quite opposed to the belief that leprosy is *contagious* or *communicable* by *proximity* or *contact*."

On the other hand we have to consider the testimony afforded us by the shrewd and intelligent teachers of ancient times. Thus, Aretœus believed it to be as contagious as the *plague*, and like *it* communicable by respiration; and *Œtius*, following *Archigenes*, thought that "the air became contaminated through the effluvia of the sores." *Avicenna* believed leprosy to be contagious in the *general* sense of that term. *Avenzoar* by contact; *Haly Abbas* and *Alsaharavius* through the respiration ; and *Rogerius* "*per coitum*."

[These interesting facts are taken from an able article in the Lancet, February 9, 1867.]

* *Pliny* tells us that the priests of *Cybele*, the mother of the gods had sharp stones with which they cut themselves in their extacies. *Catullus* says, that *Atys* demasculated himself with such an instrument.

The Rabbinical law stands thus : we may circumcise with anything, even with a flint, with crystal (glass) or with anything that cuts, *except with the sharp edge of a reed*, because the *enchanters* make use of that, or it may bring on a disease." Again we have the evidence of *Leutholf* that the Æthopians used *stone knives* for circumcision in his time 1581. Speaking of the *alnajah*, an Æthopian race, he says :—"Alnajah gens œthiopum cultris lapideis circumcisionem peragit"

Mr. E. B. Tylor in his "Researches into the Early History of Mankind," has suggested as the probable reason why stone was used as a cutting instrument, that it was less likely to cause inflammation than either bronze or iron. And *Pliny* states that the mutilation of the priests of *Cybele* was done with a sherd of Samian ware to avoid the same danger.

of generation ; and it is not unreasonable to suppose that the surgical interference necessary for their removal has given rise to the general term of circumcision.

"Simple *excision* of the *clitoris* has been practised for very many centuries by certain nations," and I purpose quoting some interesting observations just published by Dr. T. H. Tanner, upon the subject. His first extract is from Strabo, the geographer, A.D. 21, who, in speaking of the Egyptians, says :—"They *circumcise* the males and *excise* the females, as is the custom also among the Jews, who are of Egyptian extraction." The custom appears to have been continued down to our own day, and Mr. W. G. Brown,* who resided for some time at Darfour, North Africa, writing in 1779, thus alludes to it :—"The excision of females is a peculiarity with which the northern nations are less familiar ; yet it would appear that this usage is more evidently founded on *physical* causes, and is more clearly a matter of *convenience*, than the circumcision of males, as it *seems not to* have been ordained by the precept of any inspired writer."

"This excision is termed in Arabic '*chafadh*.' It consists of cutting off the clitoris a little before the period of puberty, or at about the age of *eight* or *nine* years."

Again, the Nubian traveller† *Burckhardt* tells us—"The daughters of the Arabs *Ababde*, and *Djaafere*, who are of Arabian origin, and inhabit the western bank of the Nile from Thebes, as high as the cataracts, and generally those of all the people to the south of *Kenne* and *Esne* (as far as Sennaar) undergo circumcision, or rather *excision* (excisio-clitoridis), at the age of from *three* to *six* years: Girls thus treated are called *mukhaeyt*."

But perhaps the most reliable account of the circumcision of females in Western Africa is that given by the late Mr. W. F. Daniel, who was a distinguished member of our own profession.

"Mr. Daniel tells us that the excisive process in Western Africa is variously performed in accordance with the usages of the different districts where it is resorted to. The operation consists either or"—

"1. Simple excision of the clitoris ; 2. excision of the nymphæ ; 3. excision of both nymphæ and clitoris ; 4. excision of a portion of the labia pudendi, with either or all of the preceding structures."

"The history of the operation is involved in obscurity, that it was secretly inculcated as one of those gloomy rites which the female proselyte had to undergo, as a preliminary measure, prior to her initation into those dread mythological creeds, which, in Egypt and the adjoining countries were swathed in the folds of an allegorical and almost impenetrable mysticism, is the most likely inference." *Eventually* the progressive decay of the religious institutions, gradually led to its promulgation and practice among the masses of the people, for the *priests* who, independent of their scientific attainments, were also well versed in medicine, might have advocated its use both in a moral and hygienic point of view, as conducive to the welfare of the female population.

I have been led into this digression by reflecting over the barbarous and unphilosophical meddling of certain practitioners of our metropolis who are in effect, degrading our practice of surgery to the level of that of the savages we have just described, without possessing the same claim to our consideration on the score of ignorance, barbarism, and superstition. The modern antic Yclept "*clitoridectomy*" (to which I refer), is, as the "Lancet" says, "a proceeding which, if it be *useless*, is a *lamentable mistake*, and if it be *unnecessary*, *a cruel outrage*."

The next proposition we may fairly look for will be to imitate still further the customs of these Western Africans who, in certain tribes, whenever a girl shows any very strong indication of sexual feeling (before she is betrothed), at once proceed to produce an obliteration of her vagina by the intense inflammatory action set up by the forcible introduction of a mass of the "capsicum fructescens," or bird pepper—to my mind not one shade more inhuman or barbarous than unsexing a woman for ever, upon an assumption which grossly libels our female population.

The position taken by the early Christians in reference to the practice of circumcision was decidedly antagonistic, so far as any *value*, in a *religious* point of view, should be ascribed to it; nevertheless, their apostles and teachers permitted it to continue, at the discretion or inclination of those who chose to submit to it.

It is an interesting fact to note that the Copts, whose christianity dates back from the persecution of Diocletian (called the era of martyrs) in 303, and the Abyssinian Christians, who also reckon from the fourth century, adopt the custom to this day, from a belief that it gives them a further chance of entering Paradise, beyond the baptism they receive as Christians. It is also singular that these sects accept several other doctrines and precepts of the Mohammedans and Jews, among whom they dwell.

The precise mode of operating upon males varies in different countries. In Madagascar three separate and distinct operations are inflicted upon the individual. In the South Sea Islands the natives simply slit up the prepuce on its dorsal aspect, and in earlier times the practice was to cut the prepuce all around the corona, avoiding the frœnum. In the Fiji Islands the instrument used is a sharp splinter of bamboo.

Upon females, the process of excision is performed by aged women. In Egypt the custom is still maintained ; and the women of the *Said* travel about from town to village, crying out "Circumcisor! who wants a circumcisor?" In Old Calabar Mr. Daniel had the opportunity of witnessing the operation, which is likewise performed *there* by aged females. The girl having been placed on the knees of a woman, with the legs apart, the clitoris was seized, *forceps-like*, by two pieces of bamboo or palm-sticks, and being gently drawn forth, was severed with a sharp razor.

Among the Jews this peculiar and distinctive mark is perpetuated in our days, and without any material change of ceremonial. The mode is as follows :—The godfather being seated, takes the child on his knees, and the operator (who may be the father of the child, if capable, or some friend of the family, or a professed expert) takes up with his fingers, or a pair of tweezers, as much of the prepuce as he intends to cut off, and, on applying the knife, says—"Blessed be Thou, O God, who has commanded us to use circumcision." He then sucks the blood, and spits it into a cup of wine, and having applied styptics to the wound, retakes the cup, and having blessed *it* and the child, pronounces the name of the child, and moistens his lips with the contents of the cup. Various prayers are then said, and the ceremony is concluded.

Though the modern Jews generally use a steel instrument, there is this remarkable exception—that, when a male child dies before the eighth day, it is circumcised prior to burial, but this is done, not with the ordinary instrument, but with a fragment of glass or flint.

The practice extended to the Ishmaelites, and, as we have already stated, was subsequently adopted by Mahomet, so that a very large section of the human race are to this day participators of a rite established considerably more than 3000 years ago.

The subject cannot be dismissed without noticing the fact that the Jews under their various captivities, subjugations, and persecutions, endeavoured, in some instances, to obliterate the marks of circumcision. This is abundantly proved, not only by contemporary writers, but by the evidence of Epiphanus, Celsus, Gelen, Paulus Ægineta, Fallopius, and others, who have enlarged upon the *modus operandi* for the accomplishment of this object. It is, further, a noteworthy circumstance that the Jews *entirely* suspended the practice of circumcision during the forty years of their wanderings in the wilderness.

In contemplating the sufferings of this unfortunate race, the heart sickens at the punishments which resulted from their resistance to foreign usurpation. Unable to discern the hand of God in their humiliation, their struggles were,

* Travels in Africa, Egypt, and Syria, from the year 1792 to 1798, p. 347. London, 1799.

† Travels in Nubia, by the late John Lewis Burckhardt, p. 332, London, 1819.

indeed, hopeless, but not the less heroic. Captives in Babylon, after a long and cruel servitude they were restored only to be again scattered by the destruction of Jerusalem, under Titus. Through the varying fortunes of the Romans, no resting-place seems to have been vouchsafed to them; plundered and disgraced, the fall of Rome only eventuated, as far as *they* were concerned, in a change of masters. Ruthless persecutors tracked them through the dark ages, and what Heathenism spared, Christianity despoiled; our pious ancestors praising God when they had a chance of maltreating an Israelite.

For these reasons, and with such incentives, can we doubt that the timid amongst them would endeavour to remove the tangible means of identity which circumcision afforded.

We have so refined away the simplicity of the patriarchal times, that it is almost necessary to apologise for alluding to the reverential awe with which all matters relating to the seed of Abraham were regarded. It was a solemn and impressive act when the Patriarch, believing that the time was come for his son Isaac to have a wife, sent for his chief servant, and said, "Put, I pray thee, thy hand under my thigh, and swear by the Lord that thou wilt choose a wife for my son out of mine own kindred;" and the servant, with his hand on his master's genitals, takes the required oath; and we all know how faithfully he performed it. Whilst this simple but deeply significant ceremony was being enacted, the heart of the father of the faithful was doubtless filled with contemplations of the great purposes for the accomplishment of which the organs of generation were appropriately considered as the direct agents.

This mode of taking the oath is further adverted to in the 47th chapter of Genesis, when Jacob is taking his farewell of his children.

In our blind adoration of classical heathenism we undervalue the sublime and not less poetical incidents which mark the rise, progress, culmination, and decay of that people, with whom our highest interests are identified. If, for instance, the Book of Job had not been written under inspiration, and had been accidentally discovered among the ruins of the *first* Babylon, our antiquarians would have regarded it as the loftiest of epics; and especially so if, instead of inculcating the worship of the true God, its subject had been in glorification of whatever false deity might have been in the ascendancy when this most ancient poem was composed.

The prejudices of education subjugate the judgment, and the gross and sensual attributes with which the Greek poets invested their deities are accepted with complacency, if not with admiration; even Pope, their great panygerist, describes their heroes thus:—

> "Gods, partial, changeful, profligate, unjust,
> Whose attributes were *rage*, *revenge*, and *lust*."

This, of course, will be set down for rank blasphemy against the canons of taste. We are exuberant in our praises of the genius of Homer, and *not to worship his inventive powers* is an offence of the deepest dye; but when we are barbarous enough to critically examine this wonderful mythology, and to determine the claims to applause—say of supreme Jove—we are rather troubled by the difficulty of reconciling the ways of the first intelligence with our commonplace notions of decency. The intrigues of the father of the gods, the artifices by which he eludes the jealousy of his wife Juno, his incestuous, and, if they were not classical, we should call them filthy debaucheries, draw largely upon our faith in the beauties of these records of high Olympus; and our admiration for the poet is sadly tinctured with disgust for the images in which his creative powers are developed.

Thus much of the ceremonial laws. Of the moral law, the law of God, it becomes me not to speak; its obligations are as eternal as its author; the everlasting truths of the decalogue have been incorporated more or less into every system of religion and ethics which has been enunciated during the ages interposing between *us* and the time when they were first promulgated on Mount Sinai.

In dismissing Moses and his times, I crave your particular attention to the manner in which the characters of priest and physician met in the same person, and as we go on we shall find that this junction of attributes continues through all the variations of time and circumstances. The terrors of the *unseen*, overawing the ignorant, placed them at the mercy of those daring minds which in every age have assumed the office of interpreters of the will of the *demon*, or the behests of the benign Deity. To deal as a mediator between the threats of the terrible avenger and the awe-stricken victim of his own bewildered imagination, to avert the consequences of the threatened storm, or to turn aside any other manifestation of approaching evil is the office of the *medicine-man* of the North American Indian and the *Obeah* doctor of the African.

Shrewd observers of nature, these wretched impostors monopolize the whole of the intelligence, such as it is, of the hordes of the human race upon whom the light of reason has never dawned, or has dawned in vain.

There is yet another aspect of the medical character, infinitely more agreeable and important, and the consideration of it will bring us to the times immediately preceding the days of the father of medicine. I do not propose to penetrate into the story of Esculapius and his divine origin, which probably, in an esoteric sense, merely meant that the Giver of all good had inspired him with a knowledge of the healing art; but (with a passing glance at Homer, the greatest poet of his own or any subsequent age), proceed to offer some general observations on the position which the study of medicine acquired under the tutorship of the philosophers.

The siege of Troy is supposed to have taken place about three hundred years before the *Iliad* was sung, and in that early time it appears that the cultivation of our art formed part of the general education of kings and warriors.

Homer introduces us to Machaon the son of Esculapius, who, when Menelaus was treacherously wounded by Pardarus, is called to his aid:

> "When the wound appeared in sight, where struck
> The stinging arrow, from the clotted blood
> He cleansed it, and applied with skilful hand
> The healing ointments, which, in friendly guise,
> The learned *Chiron* to his father gave."*

Making due allowance for the debasing fable with which every great name or talent is overlaid, it is rational to suppose that Chiron, the teacher of Esculapius, was one of those shepherd philosophers, who like their Babylonian brethren absorbed all the knowledge of the times; but Homer gives us other examples in support of this idea. Chiron was the preceptor of Achilles, and when Machaon is himself wounded, Patroclus is sent by Achilles to his assistance: on his arrival he is urged by Eurypylus, to

> "Draw the deadly dart,
> With luke-warm water wash the gore away:
> With healing balm the raging smart allay,
> Such as sage *Chiron*, sire of pharmacy,
> Once taught Achilles, and Achilles thee."—*Pope*.

He also complains that

> "Of two great *surgeons*, Podalirius stands
> This hour surrounded by the trojan bands,
> And great *Machaon* wounded in his tent
> Now wants the succour which so oft he lent."

Then

> "Patroclus cut the forky steel away,
> And in his hand a bitter root he pressed,
> The wound he washed and styptic juice infused,
> The closing flesh that instant ceased to glow,
> The wound to torture and the blood to flow."

Machaon seems to have largely shared the goodwill of the Grecian hosts. Nestor, in his anxiety, says:—

> A wise Physician skilled in wounds to heal,
> Is more than *armies* to the public weal.

Military leaders in our days have no such weakness as this. Studied neglect seems to them the befitting recompense of those on whom they must necessarily rely for the health and sanitary welfare of their troops.

As we are still in the age of fable, it may not be out of place to notice with what tenacity the human mind clings to those delusions which fear engenders, and weak hopes

* Lord Derby's Translation.

sustain : with all our boasted enlightenment, the *marvellous* and the *incredible* have more worshippers than the *real* and the *true*. Let us not wonder then, that the pure *monotheism* enunciated in the Holy Scriptures had so little charm for the sensuous and imaginative Greeks. Socrates, who, by the simple force of reason and philosophy had reached the very portals of the temple in which was enshrined the idea of the unity of God, in his *last hour* "Sacrifices a cock to Esculapius." The reputed offspring of an impure deity, history is unhappily more abundant in records of human folly and superstition, than in examples of purity of thought and action—simplicity is everywhere despised—facts are distorted or made subservient to sensations, for example :—It is not enough to tell us that Chiron was skilled in physic, but to suit the depraved appetites of the vulgar he is a *centaur*, and Esculapius a *god*. It is therefore with something like relief that the name of Hippocrates comes before us for in him we have a *reality*, and in his works a remarkable record of the condition of medical science in the fifth century before Christ. He was born at Cos, a small island off the coast of Caria not in Greece proper, in the first year of the 80th Olympiad.

He was descended from Esculapius by his father's side, and from Hercules by his mother's, and was the son of Heraclides, a physician of the family of the Asclepiadæ, who furnish us with the very earliest instance of a body of philosophers devoting themselves to the healing art, for, although Pythagoras, who lived immediately before Hippocrates, and Democritus, who was his contemporary, were both learned physicians, yet whatever fame they acquired, was ascribed to their powers as mental philosophers and rhetoricians.

It has been urged by way of apology for the mystery in which the philosophers shrouded their wisdom, that "science, like modesty, should cover itself with a veil to increase the charms of the treasure it conceals," and this principle has been, throughout all ages, more generally acted upon than avowed.

The character of Hippocrates is at once a study for the physician and the moralist ; the former will appreciate the astonishing evidences which his works afford, of a deep acquaintance with the whole subject of medicine, and his admiration will be increased by the remembrance that all the principles laid down by this great and good man were the results of his *own* experience.

No treatises on disease existed anterior to his time to aid him in his investigations of the phenomena of nature, although it is true that in the Asclepion or temple of Esculapius at Cos, records were kept and votive tablets preserved commemorative of cures performed, and the remedies by which they were effected. But if the physician admires his talents, the moralist does honour to the qualities of his mind and the goodness of his heart. Benevolent and disinterested, pious towards the gods, and incorruptibly devoted to his country, he instructed his fellow-men, not by shedding maudlin tears over their follies, like Heraclides, nor by the coarse laughter of his friend Democritus, but by a calm and even walk of life, mitigating sorrow by his skill, and showing the form and beauty of virtue by his example.

His portrait of a worthy physician may well serve for his own likeness, and in its description we shall observe that the same exalted principles of professional ethics therein inculcated are as strictly applicable to our own times as they were to those which he himself enlightened and adorned. His words are :—"The physician who is an honour to his profession is he who has merited the public esteem by profound knowledge, long experience, consummate integrity, and irreproachable life ; who, esteeming all the wretched as equals in the eyes of the Divine Being, hastens to their assistance, speaks with mildness, listens with attention, bears with their impatience, and inspires that confidence which sometimes of itself restores life ; sensibly alive to their sufferings, carefully studies the causes and progress of the complaint ; not disconcerted by unforseen accidents, but, in emergencies, having exhausted his own resources, holds it a duty to call in his brethren of the healing art to assist him with their advice. Having struggled with all his strength against the malady, he is happy and modest in success, and in failure congratulates himself that he has, at least, alleviated the sufferings of his patient."

One of the great obstacles to the advancement of anatomy and physiology was the universal reverence for the dead which the Greeks and Romans shared in common with all the people of antiquity. Among the Jews, to touch a dead body exposed the offender to a penance of seven days exclusion and privation from the ordinary comforts of life, and it is almost superfluous to add, that the Egyptians made this reverence a part of their religion.

He, then, who ventured on the dissection of the human body, did so at great personal risk, and more than 600 years after the foundation of Rome no instance is known of the existence of any public professor of anatomy. About that times Archagathus, a Greek, practised surgery in Rome, and it appears that his use of the knife, and the actual cautery, was so abhorrent to the general feeling, that he was saluted with the opprobrious title of "Carnifex." Even in later days the learned Tertullian classed anatomists and butchers together in a phillipic he pronounced against Herophilus, whom he charged with having tried experiments on the living body. He commences :—"Herophilus, the physician, or butcher, whichever you please, who, to become better acquainted with men, ripped them up alive," &c., &c.

Of this same Herophilus, who appears to have been a man of humour, as well as genius, there is an excellent story told, as follows :—A certain *Diodorus*, a contemporary philosopher and teacher of paradoxes, declared that there was no such thing as *motion*. "If a body *moves*," says he, "it moves into the place where it *is*, *or* into the place where it *is not* ; now it does not move into the place where it *is*, for what is *in* a place *remains* there, and, consequently, one cannot say that *it moves*. It also cannot move in a place where *it is not;* and, therefore, it does not move at all." This acute gentleman having dislocated his arm, begged the services of Herophilus, who, smiling, said :—"Either the bone of your arm is moved into the place where it *was*, or into the place where it *was not* ; now it cannot move, according to your principles, either in one place or another, consequently it is not displaced at all." The poor teacher of paradoxes saw that Herophilus was laughing at him, and in an agony cried out :—"Leave, I pray you, *dialectics* and *sophisms* to me, and treat me according to the laws of medicine."

The inference that dissection was not openly allowed, will be strengthened by a short reference to the subject of the embalment of the dead—the first mentioned of this custom is found in the 50th Chapter of Genesis ; where, at the second verse, we read :—"That Joseph commanded his servants, the physicians, to embalm his father, and the physicians embalmed Israel;" and at 26th verse of the same chapter it is written :—"So Joseph died, being one hundred and ten years old, and they embalmed him."

The Egyptians believed that so long as the human body could be saved from putrefaction or decay, the soul of that body continued in existence ; and from this feeling arose the custom of embalming, so common in remote ages. The embalmer was, in a certain sense, a *sacred* functionary ; nevertheless, it was the fashion to make a show of resistance, when he began his operation, in order to mark the innate horror of any, however necessary, profanation of the dead body. Herodotus relates that in Egypt the mummy embalmers made the incision in the side of the corpse with a sharp, æthiopic stone. Of these stones two varieties have been found in the tombs in Egypt, both of chipped flint, and very neatly made. One kind is like a very small cleaver ; the other has more of the character of a lancet. The account given by Diodorus Siculus of the resistance offered to the embalmer is, as follows:—"And first, the body being laid on the ground, he who is called the scribe marks on its left side how far the incision is to be made ; then the so-called slitter (paraschistes) having an æthiopic stone, and cutting the flesh as far as the law allows, instantly runs off,

the bystanders pursuing him, and pelting him with stones, cursing him, and, as it were, turning the horror of the deed upon him, for he who hurts a citizen is held worthy of abhorrence."* Immediately after death the corpse was put into the hands of the enbalmer, who, in the presence of the friends of the deceased, made an incision into the left side, as above described, through which he extracted all the intestines, leaving the heart and kidneys; the intestines were then washed in palm wine, and a solution of astringent gums. The *brain* was removed through the nostrils by means of a hooked instrument, contrived for the purpose, and the cavity filled with aromatic oils. The body was now anointed with spice-oils and balsamic gums (frankincense being prohibited), and allowed to remain for thirty days, after which it was immersed in a solution of nitre for from forty to seventy days (the latter being the extreme limit allowed); it was then enveloped in aromatised cere-cloths, and all being ready, consigned to the coffin, on which were painted emblems indicative of the condition of the deceased.

(To be continued.)

Original Communications.

THE INFLUENCE OF THE DISCHARGES AND NERVOUS SHOCK ON THE COLLAPSE OF CHOLERA.†

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(Continued from page 183.)

Dr. LENEY, a physician practising in Bray, has, within the last week or two, recorded cases of what he terms "Contagious *Hæmorrhœa Serosa*," a disease it appears, differing from epidemic cholera; here, the discharges were immense, cessation of the pulse, and other phenomena of collapse rapidly occurring.

An escape of the constituents of the blood so sudden, rapid, and excessive, seems almost incredible until we reflect upon the vast extent of the surfaces engaged, the capacity of the tubing to receive and, for a time, the almost boundless sources of supply. Secretion it is not, but one almost incessant current from myriads of minute converging streams knowing no let or hindrance save that afforded by the frail barrier of the limitary membrane of the tract.

Researches, comparatively recent, have thrown some light upon the physical phenomena of currents traversing membranes, and the means to moderate or, even to reverse, their action.

Dr. Alderson, in a recent lecture on cholera, has ably applied the experiments of *Matteuci* and *Bacchati* respecting the process of exosmosis, to the escape of fluids in cholera. There can be no doubt that his explanation greatly aids us in understanding the physical phenomena of the current, but it fails (as I suppose he would concede,) when applied to the higher causation of the malady; it does not reach those vital changes which precede and determine the rush of fluid to the membranous walls of the stomach and bowels.

Not to break the filiation of the argument as regards these simple, though profuse evacuations, we have to consider them in their immediate connection with cholera—as the destructive and not eliminative elements of the disease. If we bear in mind the fluids lost by the premonitory diarrhœa, and the amount of serous vomiting and purging coinciding with and following the developed disease, such a dissipation of the fluids seems alone sufficient to produce the extremest degree of collapse independently. even of the primary nervous shock to be referred to subsequently. I reproduce the testimony of Schûtz of Berlin who has had immense experience in cholera. He states, I have known patients brought into the hospital with but moderate vomiting and purging and no unusual depression of temperature or of pulse; before my very eyes, these patients suddenly passed *enormous serous discharges from the stomach and bowels*, and *pari passu*, sunk into the most perfect algide stage. This is no unusual result, cholera literature abounds with such. I do not not see how such losses can be regarded otherwise than destructive, totally disproportioned to any critical requirements, and, determining all the symptoms it is our object to prevent.

So far for the *outward* indications of discharge. Let us now trace it in its *hidden* form. This stage of the pathology of cholera is of the highest importance to investigate, since it is alleged that cholera can prove fatal, by sudden collapse from the influence of the poison on the blood, without the customary drain. The power of cholera, suddenly to kill, I can neither affirm nor deny, but, I may say that such a mode of death is not seen in this country. That an intense influence of the agent when it has begun its action in the gastro intestinal tract may quickly, indeed, simultaneously, paralyse the heart, intestines, and, arrest nutrition, is certain, though never, I believe, without internal transudation. The fact, however, of comparatively sudden death has been so confidently stated, that we cannot evade such fact, neither ought we to attempt it. Mr. Jameson, in his graphic account of an outbreak of cholera in the camp of the Marquis of Hastings and, subsequently, during a march, speaks of hundreds rapidly falling, dying or dead. We must, however, liken this to the general description of a battle; striking incidents, only, are narrated, while minuter detail is left to later despatches. But, with regard to this very class of cases, the experienced Indian pathologists are scantiest in their *post-mortem* results. In any disease, with a well known pathology, we may, occasionally, find exceptions in some particulars, which would not vitiate the general result; but when such exceptions are selected to form the *basis* of a theory, it clearly behoves us to challenge and to scrutinize them most exhaustively. I must, therefore, endeavour to supply the *post-mortem* deficiency alluded to, from the experience of investigators nearer home. Cruveilhier, whose reputation as a morbid anatomist needs no eulogy of mine, made between two and three hundred examinations of cholera patients, and thus expresses himself with reference to cases unattended by much outward discharge. "It was particularly in individuals who had only passed a few choleraic discharges that this enormous quantity of fluid was discovered in the stomach and bowels after death;" again, "some patients did not pass during life, one single alvine evacuation, but, notwithstanding, their intestines were found after death, filled with the peculiar fluid." Those most accurate pathologists, *Reinhardt* and *Leubuscher*, state "In general, death occurred after the period of the very frequent and excessive discharges; there were exceptions, however, for many patients died before the rice-water secretion contained in the bowels could be evacuated." Scot, also, declares "that the stomach and bowels have, sometimes, been found after death, filled with fluid, though no vomiting and purging had been observed." To finish with one more very recent statement; Dr. Leney, whose observations have been before referred to, in drawing a contrast between "Hæmorrhœa Serosa" and epidemic cholera states, in reference to the late epidemic of the latter in Ireland, that those cases in which the secretions were retained, no evacuations taking place from the stomach and bowels, proved the most suddenly fatal, and, on post-mortem examination, both stomach and bowels were found distended with sero-albuminous fluid, almost to bursting. Numerous other confirmations might be cited to show that, while some patients die from shock and profuse external discharges, others, die from shock and from the same discharge though, during life, it is concealed from view, and not from any poison uneliminated from the blood. We must not, therefore, when a patient is brought into hospital, cold and pulseless, yet with but little drain, infer they die from poison in the blood; their history generally shows profuse anteceding discharges, and the abdomen is still dull to percussion and

* Taken from E. B. Tyler—"Early History of Mankind," p. 217.
† Read before the Medical Society of London, Feb. 11, 1867.

resistant on palpation ; neither must we forget that with the squalid and ill fed poor, though no real disease exist, their power of vital resistance is at times so low that discharges, comparatively small, may cause a fatal collapse. That recovery can take place under drain, is certain, but not as it appears to me, from any further elimination of poison from the blood. The excretion of fluid, is, I am quite sure, sometimes the result of returning power of the canal, and also, an evidence of the return of general reaction.

From the consideration of this amount of serous fluid either ejected from or retained within the gastro-intestinal canal, we naturally turn to the condition of the blood from which the abstraction has been so suddenly and directly made. How greatly changed it is both in its vital and physico-chemical endowments, all admit, however opposite the theory that each may hold. We may even proceed a step further and affirm such changes to be sequential, at least, that none, appreciable to sense, attend the onset of the disease. *Majendie*, than whom none could have had a larger experience in cholera, inasmuch as he attended between five and six hundred cases, states "I have seen on numerous occasions, in England, bleedings before the algide stage, at two or three hours interval ; it was not possible to detect any difference between the blood drawn and that of a non-choleraic subject. * * * It is worthy of remark that the blood is not changed at the onset of the disease, but gradually, as it progresses, hence I infer that the alteration is the consequence and not the cause of the disease. Permit me further to quote the testimony of two very competent Indian observers. *Scot* writes "It is established by the replies to this letter, as well as by an immense mass of concurrent evidence, that the blood is of an unnaturally dark colour and thick consistence. These appearances are very uniformly expressed by the terms dark, black, tarry, in regard to colour ; and by thick, soapy, syrupy, semi-coagulated in respect to its consistence. The change in the condition of the blood is, likewise, fully proved to be in the ratio of the duration of the disease ; the blood at the commencement seeming to be quite natural, and, more or less rapidly assuming a morbid state as the disease advances." *Searle* also, states "It is established by undoubted evidence, that the blood is of an unnaturally dark colour and thick consistence ; these changes in the condition of the blood are, likewise, fully proved to be in the ratio with the duration of the disease."

The examination of the residual blood shows, that, in all epidemics, the total amount is diminished. In some cases, doubtless conditioned on the extent and continuance of the drain, the quantity remaining is so small, that scarcely a pint can be collected free. This amount of varying consistence, is massed in the heart, lungs, pulmonary arteries and veins. The systemic arteries are generally empty, and the large organs more or less anæmic. From the admitted density of the residual blood, and from the special losses it has sustained, we can easily conceive many of the physical characters accorded to it. But, with regard to the changed colour of the blood? not a relative darkness from simple aggregation, but one absolute, and all important. Let us not forget that the black colour did not exist at first; whatever its cause, it is the consequence of the *progress* of the disease. It cannot always be the result of obstructed passage through the lungs, since, during the early part of the cyanotic stage, the left ventricle contracts, and arterial pulses are still, though feebly, to be felt. They do not beat on air, and we can have no better proof they circulate black blood, than the fact well and repeatedly ascertained that, if an artery is opened during life or rather before its immediate close, the blood exhibits the same well-marked black colour. With a view to the possible solution of this problem, we must enquire afresh into the effect of the sudden and excessive abstraction of the plasma as specially affecting the blood disks. When a given quantity of the plasma has left the main vessels, and all available sources are cut off for remanufacture, the disks are said by *Schmidt*—one of the very highest authorities on the subject—to permit exosmosis of their proper nutritive elements into the main current. They yield in part their globulin and hæmatin—elements as important in the life-history of these microcosms, as they themselves are in that of the macrocosm of the body. So that we have injured disks, and white corpuscles retained in a fluid, which has been robbed of its water and salts, partly spoiled as to its fibrine and albumen, and altered, as to its consistence. It is precisely at this juncture, as I believe, that change of colour commences which explains, in part, the subsequent phenomena. If the nutrition of these minute, though important organisms is dependent upon a standard composition of the blood plasma, and, if this fluid is modified as supposed, is it surprising that the disks, after the loss of their own internal pabulum, should participate in the disorder and become, at least temporarily paralyzed as it were, and unfitted for the object of their ceaseless journeyings—outward bound with oxygen for distant capillaries, and homeward laden with carbonic acid which they should discharge into the air cells. That they are, now, inadequate to the final end of their normal freightage is probable, since they pass the lungs unpurified and onwards to the left heart, systemic vessels and coronary arteries, in which last, they powerfully concur, in combination with nervous shock to bring the circulation, gradually to a stand still. By nervous shock is implied, not alone the primary depressing influence of the poison, but also, the exhaustion induced by vomiting, purging, and cramps.

There is nothing speculative in the above statement, for *Rayer* has conclusively shown that no chemical change occurs during either inspiration or expiration as the algide stage progresses ; hence, the warm breath of health is replaced by one of unnatural coldness.

With regard to respiration generally, the respiratory centre is but slightly modified, the mechanical part of the process is essentially perfect, though, often, accidentally impaired by the severe cramps of the abdominal, thoracic, and diaphragmatic muscles. In a published memoir, I have stated as the result of my observations, that embarrased breathing is not of constant occurrence in cholera. So essential is it to have a clear understanding on this cardinal point that I shall quote fuller evidence in support of my assertion. "Respiration is often nearly natural when the pulse is gone."—*Mackintosh.* "In the algide stage the respiration is sometimes natural so far as regards the number of respirations and the extent of the movement."—*Majendie.* "In the algide stage, the respiration is sometimes natural, at others, quickened or slackened."—*Cruveilhier.* "Respiration is not usually interrupted in the early stage unless by spasm."—*Scot.* "It has been shown that *cholera asphyxia* affords a remarkable illustration of the fact that respiration may continue free after the circulation, to all appearance, has ceased."—*Bell.* "Respiration is not, usually, interrupted in the early stage of cholera. In many cases terminating in death, respiration has gone on in its mechanical part with little or no interruption except, that it has become slower and slower. . . . In natives, respiration is, generally, pretty free until the very last."—*Searle.* "In many cases the respiration was quite calm till death."—*Reinhardt* and *Leubusher.* "I have known the respiration to be quite easy, and noted it as such, while the cramps, coldness, small, rapid arterial pulse and inelastic skin indicated the advance of collapse."—*Horace Jeaffreson.*

It appears, then, that in a very large proportion of cases, no true lung dyspnœa—no marked "besoin de respirer" necessarily exists although in some cases, it has, doubtless, been observed.

The testimony afforded is that of the very best observers, —and the results of pure clinical study.

Every theory of cholera must, in common with the other established *data*, submit to be tested by such evidence, and, if it will not stand such test—will not square with all the pathological facts of the disease, it fails in the required comprehensiveness.

During the cyanotic and glacial stages we may infer then, that some amount of black blood circulates for a time,

as in cases of congenital cyanosis, but why, in cholera, the brain, the only support left of the great tripod of life, should preserve almost to the last its higher functions intact, is a problem which neither the time nor my ability would permit me, properly to discuss.

That the condition of the blood is such as has been described is rendered more than probable from the effects so instantaneously following saline injections into the veins. Shortly after the fluid has entered the vessels, the colour improves, the temperature rises, the pulse returns, and the tissues again fill out, showing that hæmatosis is restored. When the injected fluid transudes, the collapse stage again returns, to be again removed by fresh supply, so that, *cæteris paribus*, this alternation might be almost indefinitely prolonged. In some well nigh hopeless cases, as in the recent remarkable one recorded by *Lorain*, one injection of 400 grammes of water at 40° Centigrade, saved the patient's life. Such results would seem to show that the condition of the blood does not so much depend upon any active general poisoning as upon such an abstraction of the nutritive material from the globules and plasma as temporarily arrests the physico-chemical conditions under which they normally act.

Algide fever, of all other affections, best illustrates the second influence contended for,—*shock*, or whatever neurotic change is comprised under it.

This remarkable affection, one of the forms of that portean malady, "*Pernicious Ague*," has been so thoroughly investigated by *Maillot* that we may confidently trust to his description.

The phenomena of algidity appear, not as a termination of the ordinary cold stage, but often, amid the best marked reaction. Suddenly, the pulse becomes quick and weak, falters, then ceases altogether; now,—but always subsequent to the arrest of circulation, the temperature, though unfelt by the patient, rapidly falls to a glacial point, and the surface assumes the cyanotic hue; respiration continues free; the cerebral functions are intact to the last. Some instantaneous change has unmistakeably occurred in the nervous centres, no other view could account for such phenomena. Life is at once in the balance, and should serous vomiting and purging supervene, is almost certainly lost.

Here, the analogy between the two affections appears most striking and strongly points to the neurotic character of both. Pernicious ague might explain the death from coma said to occur in cholera, coma being one of the most common terminations of the former disease; it might further aid our explanation of those cases characterized by such rapid failure of the circulation and the temperature as are described in cholera: in both, the blood is black and stringy; in both, the heart is robbed of its contractile power.

Cholera, by universal consent, has been regarded as a mysterious disease. It doubtless is so. Yet more, perhaps, in the sense of the riddle of its proximate causation than in that of the fulness of its pathology. It is not like a violent shock fatally depressing the circulation through the nervous system; here, there may be no loss. It is not like a simple, though dangerous hæmorrhage, since here, although the vessels pour out their contents yet, should the circulation rally, there still is left some pure blood, a contractile heart, and magazines operative for repair and immediate fluid supply to the vessels. It is not, altogether, like pernicious ague, for here, paroxysmal recurrence of algide phenomena is the law. Cholera is, so to speak, the sum of these influences combined. It is the result of some special agent profoundly modifying the function of the extensive gastro-intestinal tract—rapidly radiating back a paralyzing influence on the great nervous ganglia connected with the spino-sympathetic centres, and suddenly abstracting from the circulation, under such depression, a large amount of blood constituents without any capital left wherefrom to write off the loss. The vital powers thus taken, as it were, by surprise, too frequently yield before they can, in any way recover.

Cholera, seems, then, in its very essence a disorder of function and, moreover, one of special functions. Upon reviewing the phenomena of animal and organic life, we found in the former, the intellect intact, volition to some extent, still active, and the muscles obedient to its mandates; the mechanical play of respiration unless from spasm, unimpaired. Look to the spino-organic system and all the disturbance that we find, seems centered here, so that if it were not so old-fashioned, one would still maintain this system to be the great centre of *functional*, I do not say *organic* change, for that would bring back the old objection that no such changes are patent to our coarser or even aided vision. But, if cholera be a functional perversion, what changes could we expect to find?

Numerous theories have been since advanced, many of interest enough to arouse attention; none of weight enough to enforce belief. The old view, then, associated with the names of *Loder* and *Delpech* may relift its head, though robed in modern garb—in a functional and not organic aspect—as a secondary, and not a primary causation.

To ascend to this causation, two conditions must be satisfied; adequate knowledge of the laws which govern the acting agent, and a more precise acquaintance with the functions of those portions of the nervous structures upon which such agent does directly or, indirectly act. The latter knowledge may, probably, be a future conquest of Experimental Physiology. We want *Claude Bernard* to do for the abdominal, that which he has done for the cervical portion of the sympathetic. But, if we could admit *paralysis*, equivalent to *section*, we might even carry the light of his researches here, and find a given sameness in result, decided augment of temperature of the internal parts of the abdomen and, an undue supply of blood to the capillaries of the gastro-intestinal tract.

I have thus adopted what appeared to me the easiest method of accomplishing my task. If the nature of the disease is sought for in its fully developed, complex state, all past experience shows that it eludes our grasp. But, if the method is reversed, and we estimate aright the simpler elements—what part the discharges play, and what the nervous influence, the difficulty of the enquiry may be thereby, somewhat lessened.

In conclusion let me observe that this paper is to be regarded simply as suggestive. The time, seemingly, has not yet come to justify any dogmatic assertions. We must still pass the old question on. We require, it is superfluous to say, a constant faithfulness in our record of individual cases—a pure record unvarnished by any theory; but what I think a still more urgent need is, of a good clinical and pathological history of the various epidemics, showing to what extent, in each, the disease may have departed at times, from its ordinary type; and tracing, if possible, the conditions under which such variations have occurred. This is the only way to reconcile differences which, unquestionably occur, and to explain contradictions which are awkward and illustrations of the common fallacy of drawing general pathological conclusions from the *data* of a particular epidemic.

I have endeavoured, to the best of my ability, with one exception, to keep as evenly in the track of fair argument and established fact as the subject would permit. To ascertain to what extent you can approve the argument and accept the facts, is the object of the paper you have been good enough to listen to.

REMARKS
ON
AFRICAN, WEST INDIAN, AND OTHER FEVERS AND DISEASES.

By ALEXANDER LANE, M.D., Surgeon Royal Navy.

(Continued from page 186.)

THIS disease called "fever" is subdivided into "stages," according either to its duration or peculiar appearance; all those symptoms will depend in each case upon some peculiar idiosyncrasy or habit of body, and then there will be some apparent difference, though none in reality. A man

in perfect health will say, quite unexpectedly, "I don't feel at all well; I feel sick; I'll go and lie down." Shortly after he feels cold, and the rigors commence, more or less violent, according to the virulence of the poison; bed-clothes are heaped upon him to procure warmth, but of no avail; he shivers and shakes until the paroxysm is over, and then what is called reaction takes place; then will be quick pulse, hot skin, headache, &c. These symptoms, then, are called "fever;" this is the beginning, and it depends upon the locality, what name it gets; as in the tropics it would be called "yellow fever," and in a more temperate clime, simple, continued, or active inflammatory fever; but it does not get the name of typhus, or putrid, until it gets more advanced and symptoms denoting putrescency set in. The virulence of the poison has not been checked; it continues to exert its fatal influence upon the system, and thus gradually proceeds from bad to worse, until it has arrived at what is called its last stage, when death, in all probability, finishes the scene.

But, supposing that, by some chance—as the specific is yet unknown—that medicines have been given which have neutralized the poison, then the result is evident; the symptoms gradually secede, convalescence follows, and, of course, there are no such things as stages. I believe it to be a fact that, in all "fever," the cause is totally ignored, and the physician contends solely with the symptoms, which he designates a disease. But, if the poison is too powerful, the result may easily be anticipated. I am well aware that one person will recover from, whilst another will succumb under, the same mode of treatment; and that the same will take place under different modes of treatment from either, such depending upon the action of the medicine on the system in each case; but I would feel rather disposed to attribute the recovery in such cases more to the strength of the constitution or mildness of the poison than the virtues of the medicines, unless, indeed, some of them might have acted specifically; besides, many cases are set down as fever which are only "febrile," arising from some local irritating action. These cannot come under the designation of the disease called "fever," produced by a specific poison, and are all, generally speaking, removed by simple means.

When fever makes its appearance, it does not follow, as a matter of course, that all will be attacked; some will escape though in the midst of it, and why? I think the reason is very obvious. There are some who, from some peculiar idiosyncrasy of constitution, are not susceptible of the influence of the poison, and therefore escape its fatal consequences. It has been said that a person acclimatized is not susceptible, either in the tropics or elsewhere; but this is a great mistake. Certainly, they are less liable. A great deal depends upon the manner of living, and the care taken. An old resident will seldom commit heavy debauches, so as to render his constitution in any degree susceptible, knowing full well the result, and should he do so the chances would be fearfully against his imprudence, the vigour of the once strong constitution having been seriously undermined by the great relaxation produced by one long continuous heat, for a lengthened period.

An epidemic does not sweep off the entire population, those who are unsusceptible of the "mal aria" will escape though they are walking in its very midst and breathing its noxious virulence. I once saw at Sierra Leone, the inhabitants of one side of a street attacked with this malady, whilst those of the opposite side escaped, and though there had been commuication, no evil consequences followed. This was attributed by some to a row of trees in front of the houses, which they said arrested its progress. People are astonished when an epidemic appears amongst them, and perhaps, they soon find out that a similar disease has appeared in another locality; then they endeavour to trace its origin to that locality; and should they succeed in establishing something, however remote or ridiculous, they will greedily seize upon it, as if it were impossible for it to have appeared there without some kind of transmission, orgetting that a similar cause may have existed at both places at the same period.

Let the thermometer stand at, from about 75° upwards, for six or eight months steadily in England, and you will have just as fatal a disease in all parts of it as ever ravaged Africa or the West Indies, we only want the heat—there is material sufficient.

The cattle plague was said—I believe some have positively affirmed it without positive proof—to have been brought over from the Continent, by cattle; and a commission was sent over to enquire into its character and origin, and what did it find? nothing; what did it discover? nothing; but, that there was the disease, and since then it has appeared in different parts of England and elsewhere, where no communication had been. The commission made an elaborate report, as in duty bound, and set the disease down as highly contagious, leaving its cause or origin in total darkness—though that must evidently have been atmospherical poison, a cause which may exist anywhere, when the means for its production are to be found.

If the remote cause of disease does not exist in the production of some peculiar poison from the earth, where does it exist? can it be in the food or drink? I think not. The poison of one disease is quite different from that of another, and yet all, in my opinion, are the produce of the earth, disseminated through the atmosphere, absorbed through the lungs, thrown into the circulation, and each appears in its own proper guise and form. There is no disease in which the blood is not poisoned to a certain extent, because the same disease will appear more or less violent, according to the extent and virulence of the poison and the susceptibility of the constitution. Look at cholera, which is produced by a most virulent poison, and for which no antidote has as yet been found; therefore we are left to fight against the terrible symptoms it produces in the best manner we can. I wonder the Government has not sent a commission into the East to look after its cause, origin, &c.; yet it has proved itself in many cases perfectly sporadic, and has appeared in places, times, and seasons when not expected. The measles or small-pox suddenly appear amongst us. Where do they come from? I knew an old lady, aged 80, die from the former, and she was the only one in that district who had them, nor were they communicated to old or young.

If the poison is in the blood, which I believe it to be, how can symptoms communicate the disease? In close and crowded, badly ventilated rooms, where there is want of cleanliness, pure air and attention, and no change of bed-linen, something very disagreeable will no doubt annoy the olfactories, but will the absorption of this produce disease? I am not prepared to say that it will not produce a similar disease, but much less violent in character—and, as I believe, without the rigors—in those who are susceptible than when produced by the original virus; and yet I would rather attribute it to the original cause, because we have no positive proof.

Where we find a disease yield to one or two medicines we may safely say that one or both are specifics against the peculiar producing poison. Where there is disease, as I said before, there is impurity of blood; therefore, the sooner we alter its condition the better, and the sooner will the affection disappear. If we cannot do this, it must linger on. Give what medicines you will, you look forward to their being absorbed and thrown into the circulation, for the purpose of acting upon some particular organ, or part, or perhaps the whole system; therefore, it is evident that if you do not wish to alter the circulating medium, you wish to put into it that state which will, or ought, to affect particular organs or localities. When you inoculate for the small-pox, do you not poison the blood? Therefore, is not the blood poisoned in all irruptive diseases? I think so. Therefore we require an antidote to the poison; if we do not possess this, is it not self-evident that treating the symptoms is all speculation? That the virus is in the blood is an undeniable fact. The patient recovers only when the strength of the virus is worn out by some peculiar tenacity of constitution, or perhaps the unconscious exhibition of an antidote, unexpected recoveries have taken

place, and to either of those I would attribute them. I never could see the propriety of slaughtering healthy cattle. When cholera makes its appearance in the village of a despotic sovereign, he might with as much propriety slay all its healthy inhabitants to prevent its being communicated to other parts of his empire. There can be no doubt about precautionary means, but I think we have had proof sufficient that all our remedial measures will not prevent the appearance of disease, nor will it appear in a place where there are not the means of its production.

When the symptoms are very violent, with a high thermometer, the finer tissues are in danger from inflammation from the continued and excessive injections of arterial blood, you must therefore, reduce arterial action. Bleeding will do this, and at the same time remove a portion of the poison, but it will not cure, there is poison behind. The inflammation produced is of a peculiar and specific character. Croton-oil will also have a desirable effect if given in sufficient quantity, so as to procure several free evacuations in the course of an hour or less ; some think this too drastic a purgative, but I have not found it to be so. When applied freely to the tongue, or dropped upon sugar and swallowed, it acts as a poison, and its effects are sudden. Its passage, like other purgatives through the entire tube, is not required ; hence there is less irritation, and the exhaustion which follows its operation is not like that which follows purely drastic purgatives. The symptoms are all much lessened in violence, the secretions are all brought into activity, and the system is rendered ready for the absorption of active medicines, such as mercury. The medicine which I found to be so serviceable was the pure nitrate of potash, in large doses, so as to saturate the system with it. It is a powerful antiseptic or anti-putrescent, and, as such, is an antidote to the poison ; but as it was apt to induce gastric irritability, I tried another medicine which prevented this, whilst it added to its influence. With regard to counter-irritation—such as blisters for abdominal pain—I found that they did not produce the same effect as when that was idiopathic, not depending upon the poison which was circulating through its vessels. The pain of the application being deceptive has often misled the practitioner, as it in nowise lessened the internal action.

The trouble and expense taken with the idea of preventing the introduction of disease are most decidedly all praiseworthy, yet they do not and cannot prevent it, as we have had such sufficient proofs ; and yet we allow a disease which is far more fatal, and, for aught we know, just as contagious, to stalk through the length and breadth of the land without let or hindrance—I refer to consumption. How do we know that it is not a contagious disease? Why not as contagious as the others ? Is it because there is no heat of skin or violent headache ? It carries off its thousands and tens of thousands in the most insiduous manner, and yet there is not one word about its being contagious. Why may not the exhalations from one lung be absorbed by another ? I see nothing to prevent it, yet all are silent upon the subject.

There is not a single symptom, however minutely described by authors and others, there is not the finest portion of disorganized matter, that is not produced by poison in the blood—call it impurity if you like, or anything else, there is something in it which should not be. Where the blood is pure there is no disease. I speak generally, and do not refer to sudden local affections, and whatever medicine or medicines will purify it, or remove that which is foreign to it, should, I think, be considered in the light of an antidote or antidotes, either in the constitution generally or in the particular local action.

When anything, no matter how trivial, puerile, or absurd, has obtained for itself a sort of ascendency, name, or fame, real or imaginary, and it has obtained the sanction of time, it is a most difficult thing to disabuse the mind of the supposed fact; for the fact may be that it has never been disputed, that no one has ever doubted; that it was not a fact ; hence when it is sought to be proved that this fact is in reality not only a supposition, but a non-entity, few will be disposed to acknowledge that they have been living for so long a period in ignorance. How difficult it is to remove from the minds of millions, illusions of the most formidable character, established in the darker ages, both from ignorance and superstition; indeed the former is the progenitor of the latter, and how fondly they dwell upon such false idealities. Talent, education, and false pride are loth to give them up, even when positive facts are adduced to prove their incongruity, yet, some time or other, they must yield to the rise and progress of science and art.

Having thus, in some degree cleared the way, and endeavoured in a few words to explain that there are such things as misnomers, names given to that which does not exist, it is but right that those who are capable of judging upon such matters, and who can fully appreciate the beauty of consistent parts should judge for themselves. I do not see why this disease should be called "fever," except so far as heat of skin is concerned, and then it is only a febrile symptom ; and as this symptom is not more prominent than any of the others, I cannot see why it should get the preference. Heat of skin seldom exists without some other local or constitutional disturbance, and, however delicate that is, there is always some arterial derangement. Where there is no violent reaction, or reaction more than ordinary, the exciting cause is proportionably mild, and where there are no rigors, where the symptoms are induced by some local excitement, they are generally removed by mild means, not requiring any active specific treatment. What produces rigors? they must have some cause, then what is it ? When no positive cause can be assigned, must we not refer it to something atmospherical. A poison hostile to the system, absorbed through the lungs and thrown into the circulation produces the first shock ; the symptoms which follow are merely the result, the system endeavouring to rid itself of this poison, whatever it may be—then how can a symptom be a disease?

Lectures.

ROYAL COLLEGE OF PHYSICIANS OF LONDON.

THE GULSTONIAN LECTURES.

By Dr. REGINALD SOUTHEY.

ABSTRACT OF LECTURE I.

DELIVERED FEB. 27, 1867.

THE NATURE AND AFFINITIES OF TUBERCLE.

THE term tubercle has been vaguely applied to any little adventitious lump by ancient authors. Within the last two hundred years this name has been specially bestowed upon two kinds of substance found in the body, the one of cheesy or cretaceous consistence, the other pearly, grey, coloured, and transparent.

Carswell was the first to see that neither colour nor form were attributes that could be relied upon in distinguishing tubercle from other things.

Rokitansky ascribed those forms to tubercle, and considered that all were varieties of one common basic orastina, itself a qualitative anomaly of the fibrine of the blood. He concluded that the organisation subsequently attained by action of these forms must have been an after-process impressed upon the original structureless exudation.

A development by *cytogennesis* of cells and nuclei, he classified the three forms together under one common appellation, because he believed them to be manifestations of an identical blood dyscrasia expressed in different degrees.

Lebert reckoned the one feature in common to the three forms of tubercle to be a peculiar corpuscle or cell—a cell, however, to which no real specific value can attach, since it is noway distinguishable from an ordinary compound granular cell.

Virchow defined tubercle to be a new growth, organized

from the first moment that it is capable of separate identification, and classed it among that group of tumours which are constructed upon the pattern of lymp glands, and which stand most closely in relation with connective tissue formations. He attributed two forms to tubercle, "a *fibrous*" and a "*cellular*," the one being nearly a modification of the other, and thus modified only by masses of the external conditions of its growth.

Tubercle forms a simple or conglomerate tumour, and possesses all these elements—cells, nuclei, and fine granules that are normal constituents of lymph glands, only grouped after an abnormal manner, and presenting themselves in parts which ought, properly, to furnish no structure of their kind. It has a build of its own, but the form ultimately attained by the tuberculous mass is vouchsafed by the external conditions of its growth. In the parenchyma of solid organs, its final shape is round, or roundish; upon free surfaces it is more or less flattened.

The cellular composition of tubercle is its idiosyncrasy, when it can pursue its own peculiar course unembarrassed by complications. Its specific cell, specific only in that it forms the principal element of its period of highest aim, is a real cell, not a nucleus, nor a solid body, colourless, transparent, and having one or more small shining nuclei in its interior. The cell on which Ghiji and Lebert laid so much stress is a much later element, significant of the stage of retrogressive metamorphosis. The true tubercle cell of Wedl proceeds, by endogenous developement, out of connective tissue cells or some embryoral modification of these.

The single tuberculum can then be seen, under the microscope, to be composed of three layers or rings; an outer of connective tissue fibrillations; a middle of perfect cells, packed close together, and passing by gradual transition into what cannot be distinguished from fine nuclei; and these nuclei again dwindling down into amorphous central granules.

The elements of tubercle are pre-eminently short-lived and degenerate, through a retrogressive fat metamorphosis, which is conducted under peculiar conditions of deficiency in moisture, such as serve to affix a special stamp upon the subsequent proceedings.

The simplest issue of the most uncomplicated form of tubercle is a species of dry crumble from within outwards. The denser, tougher, and more fibrous the structure is in which tubercle is developed, the more slowly retrograde changes are brought about in it; whereas, the softer and moister the matrix tissue of the growth, the more rapidly this breaks down and shells out.

When the external conditions are neither especially moist nor dry, the transition of tubercle is favoured towards a cheesy mass in which state it obtains its longest period of persistence.

Finally, grey and yellow tubercle differ from each other only in the amount of accidental interposed fat elements that they respectively contain. The more yellow being, as might be supposed, that which is most rich in fat. The grey granular tubercle softens at a peak point, the miliary nodule seated in the parenchyma of a solid organ softens at its centre, and peripheral softening affects the conglomerate form only, when the change ensues not spontaneously from any inherent proclivity of the mass, but is induced by external influences, such as inflammation or excess of moisture in the surrounding parts.

The lecturer then entered upon the progress and metamorphosis of the tubercle growth in particular tissues, specifying the changes that it underwent when exposed to peculiar external influences, illustrating the several points from the development of tubercle upon mucous membranes, in bone, in nerve substance, and in the kidney; he considered that it would be profitless to discuss how minutely the views which had formerly been entertained upon the origin of tubercle, first, because any caseous mass was thus reckoned by older writers, and secondly, because the opinions as to its nature have been too exclusively derived from its pusora in pulmonary tissue when it is always difficult of recognition, and most speedily deviates from its external state.

CLINICAL LECTURES

DELIVERED IN

STEEVENS' HOSPITAL,

TOGETHER WITH

OBSERVATIONS ON PRACTICAL MEDICINE.

By Sir HENRY MARSH, M.D., Bart.,
PHYSICIAN IN ORDINARY TO THE QUEEN IN IRELAND.

Edited by J. STANNUS HUGHES, M.D., F.R.C.S.I.,
PROFESSOR OF SURGERY IN THE ROYAL COLLEGE OF SURGEONS IN IRELAND, SURGEON TO THE LORD LIEUTENANT'S HOUSEHOLD.

REMARKS ON CHLOROSIS AND HÆMORRHAGE.

(Continued from page 189.)

OCCASIONALLY I have observed chlorosis to have arisen, as it were, spontaneously, and without the intervention of any one of the usually assigned causes; and that too within a very short period of time. I have noted cases in which the transition from a state of apparent health to that of fully formed chlorosis, has not occupied more than a week or ten days. Such a disease, thus rapidly established, and without any palpable cause, strikes one as a very singular phenomenon.

Equally remarkable is the slow and gradual development of the disease in young persons not exposed to any influence whatever, to which the disturbance of the health could be referred. When a cause has been in operation, which we can seize upon to account for the altered aspect and condition of the patient, our wonder is less excited; but when, on the minutest scrutiny, we are unable to discover any cause capable of giving rise to the disease, we are naturally led to inquire, how can this be? I have seen the disease to arise in young persons placed in circumstances the most favourable and conducive to health; and have been unable, after the most careful investigation, to discover any cause, either in the habits of life, or the affections of the mind, sufficient to account for the great change which had been wrought, the remarkable depression of the vital energies, and the totally altered colour and complexion. Can we throw any light upon a subject involved in so much obscurity? The result of many observations which I have made is, that the source of the morbid action is struma. The imperfection of organization, hereditary or acquired, usually termed struma, is the source of many constitutional as well as local evils. Amongst the former is chlorosis.

Of those affected with this disease, a very large proportion is strumous. In no instance have I met with a case of spontaneous chlorosis, except in a member of a family, upon each of whom the characteristics of the strumous diathesis have been unequivocally impressed. Though this does not explain all, it gives, at least, a clue to the interpretation. We shall, however, postpone any further remarks on this part of the subject, as they come more properly under the consideration of the signs and evidences of the strumous diathesis.

We cannot dismiss the subject under consideration without making some allusion to what may be termed the essential treatment, without instituting the important inquiry,—do the resources of art furnish us with any substance, mineral or vegetable, capable of restoring to the blood its normal density, and its due proportion of red corpuscles? The answer to this question points at once to a mineral, the efficacy of which is as remarkable as that of any other medicine in the whole catalogue of remedies; neither do bark, nor mercury, nor wine, nor bleeding, nor opium, nor antimony, even when most judiciously administered, exhibit effects more manifestly therapeutic than iron does in this disease; nor does iron bring more of wealth to the inhabitants of the country from the bowels of whose earth this valuable ore is dug up, than it does of richness to the blood of the chlorotic patient. It is remarkable, too, how universally diffused are chalybeate springs, as if it were the design of Nature that iron in abundance should

be mingled with the blood, and that it should be incorporated largely with vegetable matter. Whether the preparations of iron produce their effects directly by augmenting the proportion of red corpuscles in the blood, or indirectly by invigorating and improving the digestive function, still there is no medicine the curative properties of which are more fully established. The probability is, that it acts usefully in both ways. Iron, then, judiciously administered, is a most valuable and important therapeutic agent. Nor is its salutary action restricted to chlorosis; there are many other pathological conditions of the animal economy over which it possesses the same power in improving the blood, and thus restoring tone to the nerves and vigour to the muscles. Often in chlorotic patients have I watched the change wrought in the system from day to day under the vivifying influence of this remedy, and most striking, and sometimes rapid, have been its health-restoring effects. Were all cases of chlorosis simple and unmixed—were it not liable to the various complications to which we have already alluded, then, indeed, the treatment were easy, and the cure certain. But it is not always the case: various co-existing affections complicate the treatment, and even forbid for a time the employment of chalybeates; besides, there are individual constitutions so intolerant of iron, so peculiarly affected by it, that we are compelled altogether to forego the administration of this useful remedy. We occasionally, also, meet with patients who cannot endure it, except in quantities too small to effect a cure; we are, in consequence, sometimes compelled by necessity to look around for a substitute, and the most efficient one which I have been enabled to discover is bismuth. Under the influence of this metal I have seen gradual and satisfactory recoveries take place in persons whose idiosyncrasy forbade the use of iron. I must not omit to mention the marked utility of cinchona and its salts, and of the carbonate of ammonia. Many bitter vegetable tonics, also, are productive of benefit; but I place more reliance on bismuth, carbonate of ammonia, and the salts of Peruvian bark, than on any of the other substitutes for iron which are usually prescribed. The injurious effects produced by iron are throbbing and pulsation of the vessels of the head, headach, vertigo, and sometimes epistaxis. In one case which lately fell under my notice it produced all the symptoms of intoxication; in another, though given in moderate doses, it caused a delirium which did not subside until the third day. Its tendency is also to produce acceleration of the pulse, heat of skin, and febrile excitement. In a few instances I have observed a well-characterized periodic fever to have resulted from its excessive administration.

There is another ill effect which iron is apt to occasion,—constipation of the bowels; this itself is one of the most uniform symptoms of chlorosis; it is, however, augmented by the ferruginous treatment. Hence arises the important practical rule of thoroughly evacuating the bowels, and of completely allaying intestinal irritation, as a preliminary step to the administration of iron; and of combining with it, during the whole progress of the treatment, such mild aperients as are best suited to the individual constitution, and best calculated to maintain a sufficient and regular action of the bowels.

The mode of administering iron is not unimportant. There is none superior to that of drinking the natural waters at a chalybeate spa; its distance enhances its value, because it involves the necessity of travelling, of change of air, climate, scenery, and associations; and the more the patient enjoys travelling, the more exhilarating will it be to the spirits, and the more effective will the remedy prove. Of all the distant spas, I know not one more generally efficacious than the Laugen-Schwalbach, in Nassau. There are many, however, for whom the weakest of these springs is too powerful; for such, a water less strongly impregnated with the mineral should be selected. Domestic or pecuniary circumstances, and oftentimes the actual condition of the patient, will preclude the adoption of this remedy; so that, for the many, the treatment must be conducted without removal from the paternal roof. To the labours of the chemist we are indebted for several excellent new forms in which this mineral may be exhibited; nor is this without its value, for the preparation which agrees best with one constitution does not accord equally well with another. There is also considerable variety in their effects; the muriated tincture, for example, produces on the stomach, bowels, and kidneys, an action far different from that of the subcarbonate or the sulphate; and so of the other preparations. Besides, in a disease which generally requires for its cure a prolonged course, it is no small advantage both to vary the preparation, and to be enabled to administer it in a palatable form. The acetated tincture of iron, a formula for which we are indebted to the late Dr. Percival, of this city, is, when carefully prepared and well preserved, a valuable medicine; given in asses' milk, or in cow's milk divested of its curd, it may be easily taken, and long persevered in.

The wine of iron, an old preparation, is one sometimes to be preferred, and may be given in the same manner as the acetated tincture. It is mild in its action, and very suitable for children. The wine of iron and rhubarb is, in many instances, a compound productive of excellent effects. The combinations of iron with ammonia are extremely useful; ammonia forms an important adjunct in the treatment of many cases of this disease, particularly those which are characterized by distressing coldness of the extremities. Mr. Bewley's effervescing chalybeate is a very eligible preparation, and applicable to many cases; impregnated as it is with fixed air, it is grateful both to the palate and to the stomach. The following formula I have also found suitable to many cases; water of the citrate of ammonia, three drachms; water, six drachms; syrup, a drachm; citrate of iron and quinine, from one to three grains:—mix, for a draught to be taken twice or thrice daily.

In both chlorosis and anæmia, I have observed that the treatment has been rendered more certainly, and more speedily effective, by administering iron in conjunction with Peruvian bark and the salts derived from it. Hence arises the value of the triple salt just named; hence also the efficacy of the aromatic iron mixture, which, when united in equal proportions with Griffith's mixture, constitutes a very useful compound. I have often prescribed—and I think with excellent results—bark, iron, and ammonia, conjointly in the following manner:—Decoction of Peruvian bark, ten drachms; tincture of bitter orange peel, one drachm; syrup of ginger, one drachm; bicarbonate of ammonia, fifteen grains. Mix. To be taken two, three, or four times daily, in effervescence, with half an ounce of lemon-juice. The compound iron pill, so prepared as to insure its solubility in the stomach, and repeated in sufficient doses three or four times daily, with the addition of about half a grain of sulphate of quinine—which, though an unchemical formula, increases much the efficacy of the compound—forms one of the most generally and certainly effective modes of administering iron. In pill it is less likely to produce headache, than in solution; and for those who can with facility swallow pills, this mode of introducing iron into the system is at once more easy, and admits, without causing disgust, of being longer continued. The saccharine proto-carbonate, diffused in a vegetable bitter, is also an excellent chalybeate. In cases which require a mild aperient, in co-operation with the chalybeate, I have found the following powders particularly useful:—Bicarbonate of soda, fifteen grains; tartaric acid, ten grains; dried sulphate of iron, from one to five grains; powdered white sugar, half a drachm. This powder should be kept in a dry place, dissolved in a wine-glassful of water, and swallowed whilst effervescing. These powders I have been in the habit of prescribing for the last ten years; they were first prepared for me by the late Mr. Fergusson of Kildare-street. I saw lately in a periodical a good formula for this powder, and very similar to the one now given. As a general rule—to which, however, there are some exceptions—iron should be given in small doses. Some of the natural chalybeate springs, which possess remarkable restorative properties, hold extremely

minute quantities of iron in solution—a hint derived from nature, which we may often advantageously adopt.

The effect of iron in changing the colour of the fæces is so well known that it is unnecessary to dwell upon it; it is also capable of producing an alteration in the aspect and properties of the urine. In proportion as the amount of red corpuscles in the blood is increased by the use of iron, change of air, or other remedies of a tonic nature, so is the quantity of urea and uric acid in the urine augmented. If the chalybeate treatment be too long persevered in, it may lead to and establish a condition of the system directly the reverse of that for which it was originally prescribed. Some time since I saw a young lady, whom, several months previously, I had treated for distinctly characterized and extreme chlorosis. In the interim she had gone to the country, had travelled, and had persevered in the chalybeate treatment for many weeks after the chlorotic symptoms had disappeared. When I saw her, I found her in a totally opposite state, complaining of flushings, headache, red pimples, and a deeply florid colour of the face. Such were the symptoms, which now troubled her far more than her former death-like pallor, and for which she more anxiously sought a remedy. The transition, in her case, was striking: she had been chlorotic, she was now hyperæmic; the red corpuscles, which had been minus, were now become plus. Of this transition I have met with several well-marked instances. A change having taken place in the condition of the blood, the treatment should likewise be changed, since the remedies necessary to ameliorate the condition of the blood in chlorosis, if too long persevered in, may originate an opposite and equally injurious state of the system. The truth of this remark is exemplified in those individuals who, by profuse hæmorrhage, are reduced to the chlorotic state. In many of these instances (in females, from uterine hæmorrhage; in males from long-continued hæmorrhoidal bleeding; and in both, from profuse epistaxis) the blood is so thinned that iron becomes the efficient remedy; but if continued too long, hæmorrhage is reproduced.

Having dwelt upon the effects of iron, and upon some of the formulæ for its administration, the inquiry suggests itself, do we possess any medicine capable of diminishing the amount of red corpuscles, when in excess, of equal efficacy with iron (whatever be its mode of action) in augmenting their quantity when deficient? Can we, in fact, take away from the richness of the blood with the same certainty that we can add to it? Obviously by bleeding, abstemiousness, and evacuations, the whole mass of the blood may be attenuated and impoverished: by these means, however, the blood is not only deprived of its red corpuscles, but all its constituents are wasted, and the object of diminishing the proportion of red corpuscles alone is not attained. Now this is a very interesting inquiry, and merits the fullest consideration. I shall merely touch upon it at present, and reserve more extended observations respecting it until we shall have spoken of the various forms of hæmorrhage. I cannot, however, avoid noticing some remarks which have been made on this subject by Dr. Freke, the clinical clerk to our medical wards, to whom I am indebted for much valuable aid in our researches in Steevens' Hospital, and whose accurate and extensive knowledge of organic chemistry is of great value in the investigation of the phenomena of disease, and its treatment.

In the year 1843, Dr. Freke published in the *Medical Times* the following inquiries:—"Would it not, then, be of importance if any means could be suggested whereby the red globules alone might be diminished, while the other constituents of the blood remained unaffected? Could this be accomplished by the hydro-sulphuret of ammonia?" He then proceeds to express his belief in the twofold possibility that such end might be effected, and that the hydro-sulphuret of ammonia might be possessed of the power of depriving the red globules of an essential constituent, "appropriating to itself a portion of that iron which would otherwise have contributed to the formation of the red globules." His grounds for such belief were, conjointly, the known affinity between iron and sulphur, the observed effects of hydro-sulphuret of ammonia on the economy, and the supposed function of iron in the globules. In the last number of the same periodical appeared an article, headed "Researches on the Human Blood," by M. Bonnet, of Lyons, the concluding paragraph of which is as follows:—"M. Bonnet has further remarked that the hydro-sulphuret of ammonia destroyes the globules completely, and deprives the blood of the faculty of assuming the bright scarlet colour of arterialization." Thus the suggestion put forward by Dr. Freke three years ago has been in a measure confirmed by the recent researches of M. Bonnet. This important practical inquiry requires further investigation; it may lead to valuable results. Whether hydro-sulphuret of ammonia acts primarily on the nervous system, as a sedative poison, or its direct effect be to dearterialize the blood, still, as a medicine, given in well-regulated doses, it may yet be found to possess curative properties.

In the second number of the *Dublin Medical Journal*, May, 1832, a case of disease of the heart was published, at my request, by my late friend Dr. Newton, in which the hydro-sulphuret of ammonia having been administered, the heart's action was reduced to forty-eight in the minute, with an abatement of all the urgent symptoms. In other cases, too, the influence of this medicine upon the heart and pulse were very remarkable. I was led to adopt this practice by the accounts given of it by Dr. Rollo, in his work on "Diabetes." I may further observe, that I have been for many years in the habit of prescribing the hydro-sulphuret of lime in the treatment of diseases of the skin. I have employed it internally, in doses of from ten to thirty drops, sufficiently diluted; and externally, in the form of vapour, of lotion, and of liniment. I have reason to speak very favourably of its effects, more especially in those cases in which, from appearances at least, we should be induced to expect an excess of the red corpuscles. Might not its action be similar to that of the hydro-sulphuret of ammonia?—and might not this investigation, if fully carried out, throw a clearer light upon the manner in which the sulphureous waters of Lucan, Harrogate, Aix-la-Chapelle, &c., and the various preparations of sulphur, influence the animal economy. The inquiry is one of interest, and involves the consideration of the treatment of a large proportion of cutaneous affections.

Before dismissing the subject of chlorosis we must notice the opinion entertained by some, that there is a close relation between the functions of the great sympathetic nerve and the symptoms of chlorosis. There are, undoubtedly, strong grounds for the opinion. The ganglionic system of nerves, termed the sympathetic, exercises so paramount an influence over digestion, absorption, deposition, secretion, circulation, respiration, and reproduction, that we cannot but conclude that many of the phenomena of chlorosis are traceable to a primary derangement in the function of this important and widely distributed nerve. I find that Dr. Hill has made some remarks on this subject, and written a sketch of the anatomy and functions of the sympathetic nerve, and its intimate connexion with the essential symptoms of chlorosis, which, when completed, shall be laid before the profession. We have noted, and have on record, a large number of cases, both of chlorosis and of hæmorrhage, in which the blood has been carefully examined; these, in a condensed form, shall be given after the subject of hæmorrhage shall have been treated of.

To Dr. Hill I am deeply indebted for his energetic co-operation in all these investigations: without the aid of his talents, industry, and perseverance, I could never have prosecuted these inquiries.

It is to be regretted that hitherto our investigations have been restricted to venous blood, the opportunities of examining arterial blood being rare indeed.

In the use I have made of the term anæmia, I wish it to be understood that it is intended to imply a diminution in the density of the blood, with pallor and debility, without any reference to its quantity, which may be either augmented or diminished.

Hospital Reports.

RICHMOND, WHITWORTH, AND HARDWICKE HOSPITALS.

ANOMALOUS CASE CONSIDERED BY SOME TO HAVE BEEN MALIGNANT MEASLES, BY OTHERS THE PECULIAR BLOOD DISEASE WHICH LATELY PREVAILED IN DUBLIN.

[Reported by Mr. YEO, Resident Clinical Pupil.]

PATRICK CUNNINGHAM, a policeman, æt. 22, was admitted under Professor M'Dowel's care, January 31st. The constable in charge gave the following account of him:—He had always been a strong healthy man, but was of a sluggish disposition, and did not like taking exercise. He always had the character of being temperate. On the night of the 29th, he went on duty in perfect health, and came off duty at two A.M. on Wednesday morning without making any complaint. An hour afterwards, he complained of getting chilled, and feeling a great pain in his head and chest, he vomited a few mouthfuls of fluid, and said he felt very cold and weak, shortly after he complained of pain in all his limbs. Dr. Nedley was sent for, and saw him at about one o'clock P.M., and ordered him calomel and opium, and a blister over his heart. He had no more vomiting during the day. At about three o'clock P.M., his face began to change colour, some dark spots appearing on it, and gradually growing larger; next his legs became discoloured, and then his arms and trunk. At eleven P.M. he "took a bad turn" and became extremely weak, and was removed to the hospital at two A.M. on Thursday 31st.

On admission, he was cold, and complained of great pain in his head, chest, and extremities, and said he felt "perished." His intellect was perfectly clear, but he seemed frightened and restless, moving from side to side in the bed. The entire surface of his body was covered with dark purple blotches of various sizes, his nose and lips were perfectly black, a large dark purple patch occupied each cheek and his forehead; the outline of these blotches was distinct and well defined, and exceedingly irregular, looking like so many small maps sketched out on the surface of his body with some dark purple stain. The pulse at the wrist could not be felt. The heart beat so irregularly and rapidly that it was impossible to count its contractions. His tongue was dark blue, covered on the upper surface with a dirty moist fur; the vomiting had stopped; he had no motion from his bowels.

He had no pain or retraction at the back of his neck, all the spinal muscles seemed soft and natural.

The blotches increased in size, and became confluent on the face and extremities, leaving here and there a few irregular spots of skin which were of natural colour. Stimulants were freely given, but he died at six A.M., or twenty-seven hours after the commencement of the attack.

Autopsy.—On making an incision through the scalp, a great quantity of dark blood flowed from the veins; the dura mater was quite healthy; the sinuses filled with black blood; the cavity of the arachnoid contained no fluid; the entire of that membrane was beautifully clear and transparent; no sign of lymph at any part; no fluid in the sub-arachnoid spaces; the substance of the brain healthy throughout. The meninges of the spinal cord were all perfectly healthy; no serous effusion, or the slightest appearance of lymph; the posterior spinal artery was filled with dark blood and looked large; the spinal cord was perfectly healthy.

The pleuræ were adherent throughout, so as to cause much difficulty in the removal of the lungs, there was about two ounces of fluid at the base of the right lung, hemmed in by the adhesions. The lungs were in a state of intense hypostatic congestion, but crepitant throughout; no other evidence of any pulmonary disease beyond extreme congestion of the bronchial membrane.

The pericardium contained about an ounce and a half of fluid, and also a small body of cartilaginous consistence, floating free in the cavity; on the front of the heart there were some removable white spots, but no sign of any adhesion or lodgment of the body in any one place. The heart large, nearly empty; a very small amount of fluid blood in the ventricles. The mitral and aortic valves quite healthy.

Liver congested, healthy in appearance, seventy-six ounces.

Kidneys slightly enlarged and congested, right, five and a half ounces; left, five ounces.

Supra renal capsules, enlarged, and perfectly black in colour.

Spleen, small, hard, and dense, seven ounces.

Stomach and entire of intestinal tract quite healthy.

Bladder, healthy, containing some clear urine, which, when tested, was found not to be albuminous.

In twenty-eight hours after death the body completely lost the dark congested appearance which it had presented, and became *vivid red.* The eruption remained well developed.

Professor M'Dowel detailed this case at a recent meeting of the Pathological Society. He said that some had regarded this disease, of which ten or twelve instances had already occurred, as an example of malignant fever, and others as a modification of measles. He saw no reason, however, for adopting either view, and was disposed to regard the disease as a modification of the cholera poison. Cholera, he observed, was essentially a hæmorrhœa, the serum of the blood being poured out into the gastro-intestinal cavity, whilst in this case there was a true hæmorrhœa, the blood (not its serum only) being poured out into the substance of the skin; and, just as in cholera, death was not due merely to the amount of serum lost, so here the cutaneous hæmorrhage was not the direct cause of death; but, like the serous hæmorrhage of cholera, was but the evidence of a morbid condition of the blood.

In this disease, which he said might be termed "petechia maligna," there was, as in cholera, profound depression of the vital powers, and rapid nervous exhaustion. In both diseases the mind remained unaffected, and in both the principal morbid changes consisted in more or less intense congestion of internal organs, especially of the lungs.

Examples of this "petechia maligna" had occurred before the outbreak of cholera last year, and the disease had reappeared on the disappearance of cholera, and hence Dr. M'Dowel considered it possible that some modification of the poison, whether telluric or atmospheric, which developed cholera, might have produced this equally fatal disease. A dark purple eruption had been recently observed in some cases of cerebro-spinal arachnitis, but it differed somewhat from that in the case above detailed. In the former dark serum was effused beneath the cuticle, and produced raised vesicles as occurs in grangrene; in the latter the blood was found effused into the cutis vera, and produced no elevation of the surface.

A REMARKABLE CASE OF MALIGNANT DISEASE OF THE LIVER, IN WHICH THERE WAS ALSO A MOST UNUSUAL CONDITION OF THE HEART.

Under the Care of Dr. GORDON.

A labourer, 50 years of age, came up from the county Westmeath, for admission, on the 1st of January. He was a strong, healthy-looking man, said he had been about two months uncomfortable from weight and uneasiness in his right side, and latterly was losing his strength, and his appetite failing; the development in the right side of the abdomen of a hard irregular tumour, with depressed centre, growing apparently from the surface of the liver, and of two smaller nodules immediately adjoining, rendered easy the diagnosis of Farre's tubercle of the liver.

Up to the period of his admission, and for a full week afterwards, the symptoms of this formidable disease were in abeyance, and caused but little distress.

On the 9th of January he began to suffer from vomiting, constipation, and pain in the abdomen.

On the 11th, the bowels had been freely evacuated, and the urine was secreted in normal quantity, but the irritability of the stomach continued, and from this time until his death, on the 31st, he was never altogether free from those two distressing symptoms, severe pain in the epigastric region, and either vomiting or inclination to do so.

The liver commenced now rapidly to enlarge, and almost daily there was an appreciable increase in size forwards of the irregular growth and of the entire organ into the cavity of the abdomen.

On the 21st, he began to complain of intense dragging pain in the belly, quite different from the sickening pain which he before complained of. This was doubtless caused by the rapidly-induced tension of the walls of the abdomen. About this time some new symptoms presented themselves —the lower half of the body became anasarcous, the urine was very deficient in quantity, and loaded with lithate of ammonia, and he began to suffer from palpitation. No disease of the heart could be detected.

The liver continued to increase in size with immense rapidity.

On the morning of the 29th, he was found in a state of complete collapse, cold, covered with profuse cold perspiration, pulseless, complaining of intense pain in the right side; the heart's action could not be felt, and was scarcely audible. He was supposed to be suffering from hepatic apoplexy. He was with difficulty recovered from this collapse.

On the 30th he was very weak, sinking fast. The walls of the abdomen, where he had been rubbing some iodized mercurial ointment, were becoming gangrenous. He died on the 31st. There was no jaundice at any time, but latterly he had the *jaune terreuse* hue so usual in cirrhosis of the liver.

Post-mortem Examination.—The liver was enormously increased in size, weighing twenty-four pounds. It had on the upper and anterior surface a large cancerous tubercle, with the depressed centre and corrugated margin. Some others over other parts of its surface, and numerous cancerous tumours were developed through its substance.

The collapse of the 29th instant was caused by a rent of the peritoneum on the right lobe. It was in a perpendicular direction, about four inches in extent. Adjoining the rent the serous membrane was now detached by a subserous effusion of blood. There was but a small quantity of blood in the cavity of the peritoneum, so that the collapse was, in all probability, caused as much by the actual rent as by the loss of blood. This latter was to so small an extent, that it must have been immaterial but for his reduced condition, and the changes which had taken place in the condition of the heart.

There was an extensive development of small cancerous tubercles through all the peritoneum, and over the pulmonary pleura.

The condition of the heart was very remarkable, Dr. Gordon observed in his clinical observations on the case that he had seen but one case exactly similar, and this occurred many years ago under his own immediate observation in the Whitworth Hospital; the case is published by Mr. Adams in the Pathological reports, vide *Dublin Medical Journal*, vol. 19, p. 322. The heart is still preserved in the Richmond Hospital Museum, and retains the shape and appearances which it then presented. In the present instance the heart was quite folded up, the ventricles, particularly the right, being quite compressed and flattened, while at the same time the wall of the ventricle was pushed inwards on itself, so that if a sharp instrument were driven through the ventricle at its external third, it would pass through the wall four times, or in four places. This condition was evidently of considerable duration, for where the ventricular walls were so compressed there was, as in the case published by Mr. Adams, a parboiled appearance, and also a gelatinous effusion, showing that they had been in contact for a long time.

The heart lay completely horizontal, the right ventricle of course quite empty, and the left nearly so. This condition of the heart was in all probability purely mechanical, produced by an emphysematous condition of the lung above and the over distended state of the abdomen below; the symptoms which belonged to it were, the intermitting pulse, the imperceptible action of the heart, and its feeble sounds, and the gangrenous condition of the walls of the abdomen, the part in which, in the present instance, the capillary circulation was carried on at the most disadvantage.

Reviews.

SPHYGMOGRAPHIC OBSERVATIONS ON THE PULSE OF TYPHUS. By Thomas Wrigley Grimshaw A.B., M.B., L.K.Q.C.P.I., one of the Physicians to Cork-street Hospital, &c. Dublin: Falconer, 1867. Pp. 13.

In this interesting monograph Dr. Grimshaw gives us the result of his application of the sphygmograph to the study of the pulse of typhus fever. Dr. Grimshaw has already shown much ability in his efforts to extend the application of methods of exact investigation to the study of fever, and we have in the pamphlet now before us another proof of the zeal and perseverance with which he pursues the path of scientific medicine. Dr. Grimshaw can at any rate say with truth that his observations were not hastily made, nor from insufficient data. For he tells us :—

"The observations upon which my remarks are founded were nearly all taken in Cork-street Hospital, the majority of the patients observed being under my own care, but many of them under that of my colleagues, Drs. Kennedy and Mason, to whom I have to return my best thanks for the facilities they have always afforded me in the pursuit of scientific enquiry. I followed about sixty cases throughout the course of their disease, the observations upon which were checked by many casual ones upon other cases. At the time the sphygmograms were taken, notes were also taken of the sensations conveyed by the pulse to the finger; the temperature in the axilla and rate of respiration were recorded as well as the other conditions of the patient. Altogether, about 3000 observations of pulse, respiration, and temperature, have been made by me, which I think must be considered sufficient foundation for the foregoing remarks. I hope they will be of interest to the profession, and eventually add, in some degree at least, to our knowledge of the symptomatology and treatment of typhus fever."

In this hope we fully coincide with Dr. Grimshaw; but we are bound to express our opinion that the sphygmograph will require great improvement before it can be of any use for practical purposes. At best, it appears to us, that it can only be regarded as affording a measure of the rhythm of the pulse, but it gives no indication of its force, its tone and its volume, which, in our opinion, can only be ascertained by the *tactus eruditus* of the physician, and which no piece of mechanism however ingenious, can replace. Dr. Grimshaw, however, frankly admits this. "What practical use," he asks, "can we make of the information offered us by the sphygmograph in typhus fever? At present, not *very* much, excepting the advantage we derive from a more accurate and definite knowledge of the general symptoms of the disease," p. 9. Dr. Grimshaw has, in our opinion, produced a very creditable essay on this subject, and we commend it cordially to our readers.

TRANSACTIONS OF THE OBSTETRICAL SOCIETY OF LONDON. Vol. VIII, for the year 1866, with a list of Officers, Fellows, &c. Pp. 404. London: Longmans. 1867.

The present Transactions of the Obstetrical Society form a more bulky volume than those of any previous year, and indicate alike the zeal of the members and the increasing resources of the Society, which now numbers 500 Fellows, possesses a well-stocked library, and enjoys an annual surplus in money which is devoted to the advancement of obstetric science. The meetings of the Society are so regularly recorded in the medical journals that it is unnecessary to enter into a description of the topics described and discussed, and we need only observe that the volume, as usual, is very elegantly got up; that the illustrations are numerous and well-executed, and that the whole presents a faithful picture of a year's conscientious work in obstetric medicine and surgery.

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"salus populi suprema lex."

WEDNESDAY, MARCH 6, 1867.

NEW AND OLD MEDICINES IN THE BRITISH PHARMACOPŒIA OF 1867.

If any fault is to be found with the forthcoming British Pharmacopœia in reference to the number of substances it contains, the accusation would lie in the direction of redundancy rather than of deficiency. Nearly all the preparations described in the Pharmacopœia of 1864 are retained, the few exceptions being the catechu nigrum, cocculus, the spiritus pyroxylicus rectificatus (methylated spirit), and the unguentum cocculi, which four are expunged. On the other hand, many have been added to the list, and some which existed in former Pharmacopœias, but were omitted in the last British Pharmacopœia, have been restored. In the present day, when the merits of all drugs are keenly criticized and called into question, when many of our most approved medicines are condemned by some authorities as either useless or noxious, and when the efficacy of drugs is by some, and these no mean guides, denied almost altogether, one would perhaps rather expect that the list of substances in our medical *armamentarium* would be considerably reduced; but the framers of the Pharmacopœia probably thought that the public, after all, notwithstanding the dogmas of the homœopathists, and the hydropathists, and the mesmerists, and the kinesipathists, *et hoc genus omne*, retained their faith in medicaments for the cure of disease, and accordingly a long and formidable array of substances, simple and compound, still figures as the constitution of our national Materia Medica.

We have the usual formulæ for pills, and powders, and tinctures, and infusions, and decoctions, and liniments, and ointments, and we find, in addition to these, that preparations are introduced having glycerine for their base, and which are called, respectively, glycerinum acidi carbolici, g. acidi gallici, g. acidi tannici, g. amyli, and g. boracis, all which preparations will probably be found useful as a means of introducing the respective drugs into the system in a cleanly and agreeable manner. The combination of glycerine with various medicinal bodies has long been in use in France, where the preparations are called glyceroles. Whether used externally or internally, glycerine is a very convenient medium for combination with more active substances.

Another series of preparations, now introduced for the first time, is that of the *vapors*, those enumerated being the vapours of hydrocyanic acid, of chlorine, of conia, of creasote, and of iodine. Of the efficacy of these preparations we cannot write with much confidence, and as they are directed to be inhaled, we should recommend that when employed great care should be exercised. The vapour of prussic acid, for instance, must be used with caution, although it is true that only ten to fifteen minims are directed to be given at a time, with a drachm of water; and as to the vapours of chlorine and iodine, they are apt to produce great irritation, and may, perhaps, do more harm than good in many cases.

The lozenges, or trochisci, which appeared in the Pharmacopœia of 1864, have received an addition to their number, the novelties being the lozenges of ferrum redactum, of ipecacuan, of chlorate of potash, and of bicarbonate of soda, and all these will be found useful adjuncts to the list, being especially well adapted for the use of children.

Two metals make their appearance for the first time, namely cadmium and cerium, the preparations of which are respectively, the iodide of cadmium and the ointment of the iodide of cadmium, and the oxalate of cerium. The iodide of cadmium, in the form of ointment, is employed to promote absorption in cases of indurations and is similar in its action to the iodide of potassium; the oxalate of cerium, which is a tasteless powder and insoluble in water, has been recommended in the vomiting of pregnancy and in other forms of sickness not depending on organic disease of the stomach, and the dose is stated in the Pharmacopœia to be from one to two grains, although perhaps a larger dose might be given.

Our old friends the Black Draught and the Black Wash both make their appearance also for the first time, and in these days of medical scepticism it may be interesting to know that the former still consists of an adequate amount of senna and salts, with the more agreeable adjuncts of extract of liquorice and compound tincture of cardamoms.

Among other novelties are the carbolic acid, which is directed to be used as a *glycerinum*, and is said to be efficacious in some cutaneous affections; the sulphate of atropia and the solution of the same, the latter being an addition which will be welcomed by ophthalmic surgeons as affording a solution of atropia of definite strength, the carbonate of bismuth, and the solution of bismuth and citrate of ammonia, both useful in certain dyspeptic affections; an effervescing solution of lithia; a solution of carbonate of

magnesia, which is probably the same composition as that known under the name of Dinneford's Magnesia; the oil of theobroma, a concrete oil, with a smell resembling that of chocolate, and known as cacao butter, used in the form of suppository, together with tannic acid, mercury, morphia, and acetate of lead with opium; the calabar bean, under the name of physostigmatis faba, and extractum physostigmatis, the dose of which latter is stated to be from the one-sixteenth to one-fourth of a grain when used internally; the compound tincture of chloroform, which consists of chloroform, rectified spirit, and compound tincture of cardamoms; sumbul root, employed in the form of tincture as a stimulant and antispasmodic; the root of veratrum viride, or green hellebore, a very powerful drug, which has been highly extolled, especially in America, as a sedative in inflammatory diseases, and in gout and rheumatism, used also in the form of tincture, the dose being from five to twenty minims.

Among old acquaintances which figured in former Pharmacopœias, but were omitted in that of 1864, many practitioners will be glad to welcome back the acetum cantharidis, and the acetum and oxymel scillæ; canella alba also reappears, though its merits are not very remarkable, and the same observation may be made of the decoction ulnic, or decoction of elm bark, and the extract of lettuce; the essences of aniseed and peppermint are restored, and are really useful formulæ: the same may be said of the liquor hydrargyic perchloridi, the compound infusion of gentian, the pilula aloes et ferri, the mistura spiritus vini gallici; the iodide of lead and its ointment have likewise been re-instated, and we think deservedly so, as the ointment may be employed without discolouring the skin, an inconvenience which attends the use of the iodine ointment; radix pyrethre, the old pellitory root, and the sympus rhaunic, or familiar syrup of buckthorn, have been somewhat unnecessarily rescued from oblivion, and the nauseous sulphate of soda, or glauber's salt, is also restored, together with the spiritus ammoniæ fœtidus, an equally nauseous drug, though perhaps efficacious in certain instances.

USE OF STIMULANTS IN POOR-LAW MEDICAL RELIEF.

We observe with regret that an unconsidered proposal to save money by refusing stimulants for the treatment of disease in workhouses has been jumped at by several Boards of Guardians with an alacrity seldom displayed in respect of charges involving any expenditure. On the 10th of December last, Mr. James Haughton, whose name is familiar in connection with Total Abstinence, moved at the North Dublin Union that the abolition of stimulants in the treatment of disease be brought under the special attention of the Medical Officers of the Union. Subsequently the matter was taken up at Cork, and a committee appointed to take it into consideration. Now, we observe that the Holyhead Guardians, who, *en passant*, we may mention, have acquired celebrity by their obstinacy and obstructiveness in sanitary matters, have decided that stimulants shall not be ordered by their Medical Officer without previous communication with the relieving officer, who, in a published correspondence, warns the Guardians of the hardship and danger to life which such a system entails on the poor. We know that differences do exist in the minds of medical men as to the relative value of alcohol in disease; but we have never heard of any one whose opinion was worthy of complete confidence who denied the necessity for its use in certain cases, while many of the highest authorities place the greatest confidence in its use. The entire movement seems to have originated with Dr. Nicolls of Longford, and Mr. James Haughton, neither of whom, though doubtless influenced by the best intentions, we venture to say, can confer a conclusive authority for its adoption, and we are not aware that their opinion has been confirmed by any person of note, except Professor Gairdner, who by no means advocates the universal exclusion of stimulants. We hardly even think that the matter has reached a stage to justify an investigation into the statements of these gentlemen, and we cannot too strongly condemn Guardians who declare their readiness to incur any risk of life or limb to the paupers under their charge for the sake of an experiment which saves money. We don't think it necessary to go into details, but we append a few extracts from such evidence as the teetotallers are able to bring, which appear to us utterly insignificant, as compared with the vast experience of the entire of the profession :—

At a meeting of the Guardians of Longford Union, the following report was submitted by Dr. Nicolls:—

"My Lords and Gentlemen—I beg to submit to you a report of the cases of cholera treated by me in the cholera wards, during the recent visitation of that disease to this town. The first cases were admitted on the 17th December, 1866, and the latest discharged on the 19th January, 1867. There were—extern cases, 20, intern, 2—22. Of those there recovered 15, died, 7—22; being at the rate of about—recovery 68; mortality 32 per 100.

"This contrasts favourably with the result of the cholera of 1849, when 77 cases were treated in the wards under my care, with the following results:—Recovered, 12; died, 65;—77. Of the first 50 cases there were—recoveries, 3; deaths, 47;—50; or, recoveries, 6; deaths 94 per 100. Those were treated with a liberal allowance of alcoholic stimulants and warmth, both internally and externally. I felt dissatisfied with this result, and determined to change the mode of treatment, which I did in the following 27 cases; withdrew alcoholic stimulants, and discontinued heat internally and externally. Immediately the improvement became visible, as the result was—recoveries, 18; deaths, 9; or, recoveries, 67; deaths 33 per 100. This convinced me that the former treatment was erroneous, and the latter correct and rational, and from that time to this I have ceased to use alcoholic stimulants in the treatment of contagious or infectious diseases, such as are usually admitted into fever hospitals and cholera wards. The difference in the death-rate in the former attack of cholera where alcoholic stimulants were used, and the latter where they were excluded, is very large, in the former 94, in the latter 32 per 100. It may be said that the cholera latterly was not so malignant as formerly, but it is generally considered by medical men and clergymen that in proportion to the number of cases, the death-rate in this and the neighbouring towns during the recent visitation was higher than in the former."

In a private note, Dr. Nicolls writes:—

"In addition to the cases treated in the cholera wards, I had six cases amongst the inhabitants of the town, every one of whom recovered—so that, out of the 28 cases I treated, there were 21 recoveries to 7 deaths. It is true the number is small, but it bears out the change of treatment I adopted in 1849."

The following is an address delivered by Mr. James Haughton:—

"Gentlemen, I have felt it to be my duty to bring the anuual

report of the medical officers of the Longford Union under your notice.

"FEVER HOSPITAL.

"Remained, 0; admitted—interns, 10; externs, 41; 51—of whom 43 recovered, six died, and two remained. Of the deaths, one was a girl, aged ten years, who, when recovering from fever, was attacked with pneumonia (inflammation of the lungs), of which she died; one was a girl aged 18 years, she was recovering from fever when diarrhœa set in, of which she died; one was a woman, aged thirty-three, a wandering mendicant, brought in speechless and unconcious; she died thirty six hours after her admission. There were also three men of very intemperate habits—one was suffering from hectic and diarrhœa, the result of a chronic abscess; one was a rambling tinker, speechless and and unconscious when admitted; another, a pensioner, in delirium tremens, of which he died; so that, in reality, there were but two deaths from fever, and those were unconscious and speechless, and died shortly after their admission. I continue the non-alcoholic treatment, which for the last 18 years I have found most successful.

"INFIRMARY.

"Remained, 60; admitted—interns, 491; externs, 272; 823. Recovered, 737; died, 45; remaining, 41;—823. Of the deaths, 13 were children not exceeding three years, and eight between three years and sixty years; twenty-four were sixty years and upwards. Of the cases treated in the infirmary many were serious surgical and midwifery, which all made good recoveries. I beg again most respectfully to direct your attention to the great necessity of having duly educated midwives in the different dispensary districts. I frequently hear of women and children being lost through the ignorance of the ordinary midwives.—I am, my Lords and Gentlemen, yours most obedient.

"S. NICOLLS, M.D., Medical Officer."

"Dr. Nicolls informs us that he continues the non-alcoholic treatment which he has found so successful hitherto. In his report for 1865 he states his practice in these plain words:—'I beg further to state, that this hospital is conducted on vegetarian and temperance principles, not one pound of flesh meat, pint of whisky, or bottle of wine having been used in it for the last fifteen years.' And he informs me that such is still his practice. This non-stimulating treatment of fever, we find by his last report, continues to be most successful. Taking the cases of death in that department, although Dr. Nicolls thinks only two should be placed to its account—the percentage is, nominally, twelve—but really only four. As we have no fever hospital in our union, I will, therefore, compare this result, as I did on a former occasion with the deaths during the past year in Cork-street Fever Hospital. In the report of that hospital for the year ending March 1865, I find that the deaths were over seven and a-half per cent., a proportion which Dr. Kennedy considers favourable, as the number of severe cases was large. It will be thus seen that Dr. Nicolls's practice contrasts favourably with that of as noble and as well managed an hospital as is to be found in these kingdoms. Dr. Kennedy states that the percentage of deaths in it from typhus fever is smaller than in England and Scotland, which he attributes to the different dietetic habits of the people in those countries, where, he says:—'They use more malt drink, and much more animal food; and there can be little doubt these habits engender a state of the system very unfavourable indeed for the attack of such a disease as fever.' Dr. Kennedy is not a teetotaller nor a vegetarian; he uses both flesh and alcohol in the cure of disease, so that his testimony in our favour is very valuable indeed. In addition to the foregoing opinion, he says, in the same medical report from which it is taken:—

'Before leaving the question of the rate of mortality in typhus, I would observe on the marked difference which it obtains between the wealthier and the poorer classes, being very much higher in the former than the latter. It is not too much to say that it is three times more fatal amongst the one than the other. In addition, a class of food is in daily use, which has, at least, a tendency to keep the system at too high a standard of health; and when to all this is added the anxiety of mind which the head of a family so often feels as regards his worldly affairs, we need be at little loss in accounting for the much greater mortality in fever which exists amongst the middle and upper classes, when contrasted with their poorer neighbours.'

"The cost per head in the Longford Union is stated to be 2s. 3d. a-week, with us it is 3s. 6d. Favourably as Dr. Nicolls's treatment of fever contrasts with that of hospitals in other parts of the kingdom, the results as regards other diseases in the Longford Union and in our union are even more striking. Gentlemen, having in February, 1865, gone at some length into this important question before this Board, I shall not now weary you by a repetition of the arguments I then used, or of the many evidences I then brought under your notice from the writings of several eminent physicians, strongly condemnatory of the free use of alcoholic liquors in our hospitals and poor-house infirmaries. On that occasion you passed a resolution, referring the matter to the Poor-law Commissioners, who had the matter investigated, which investigation proved that Dr. Nicolls's statements were fully borne out by facts."

Notes on Current Topics.

ROYAL SOUTH HANTS INFIRMARY.—An investigation by the Committee of Management of the Royal South Hants Infirmary into some cases of alleged bad surgery has recently taken place. We have received a number of newspaper reports and comments upon the proceedings, but in spite of a diligent perusal have been unable to find amongst them many important facts bearing upon the points at issue. From what would appear on the surface, the profession is in a very unsatisfactory state in the town, and the infirmary, we should fear, not likely to increase its subscription list, by the late investigation. Mr. Scrase, pursuant to notice, brought forward some cases in which he averred there had been bad practice in the infirmary. The first fact that strikes us about them is, that none of these cases are recent. They occurred as far back as 1858 and 1859. Nevertheless, they are now brought forward, and a formal committee of investigation undertakes the inquiry. Such being the case, it might have been anticipated that the inquiry would be conducted with the utmost calmness. We find, however, the strongest excitement prevailing. Every speaker seems to have argued with the warmth of an advocate; even the chairman, who should surely have possessed some of the impartiality of a quasi-judicial functionary, saying, according to a local journal, that "if Mr. Scrase did not *substantiate his charges, he would go out of the room a dishonoured man,*" adding, that it "was no joke to come there and sit for a long time, and unless the cases were conducted properly, he would shut up the book, and consider he (Mr. Scrase) had failed to prove his assertions." An inquiry carried on in this manner could scarcely result in any good, nor was it likely to give much satisfaction. For the sake of the profession we are glad to record that the committee entirely acquit their staff, and record their best thanks to them. But there are larger issues involved, and we propose, on a future occasion, to revert to them. At present we have certain enquiries of our own going on, pending which we shall reserve some points. We will, however, devote a few lines to a feature of vital importance to the infirmary and to the profession in Southampton. Several years ago an enquiry was made into some alleged mismanagement of that institution, and the very cases recently brought up were then alluded to. At that date it became abundantly clear that there was urgent need of reform in the general management of the institution. The practice of the infirmary was virtually secret—the practitioners of the town not on the staff being excluded from entering it even as visitors. This was condemned by the whole profession, and the several journals agreed upon the necessity of other changes. Now, so far as we have hitherto heard, those changes have not been carried out. Let then the governors address themselves to this wider subject. The very fact of

renewed charges being brought forward argues something wrong in the system under which this becomes possible. Had everything been in a satisfactory condition during all these years would Mr. Scrase have taken upon himself to renew this charge against the staff? Surely there is something else with which he and those who support him are dissatisfied, and this is made a mere stalking-horse. We do not indeed applaud the plan. An attack upon a professional man is to be strongly deprecated, except in the most extreme circumstances. No good can come of it, but much evil may. While, therefore, we rejoice that the reputation of no one has been injured by the decision of the committee, we would urge upon that body the necessity of no longer delaying to march with the times. Seven years ago their Infirmary was one of the closest boroughs in England, an age behind the time. What is it now? Has Reform been even proposed? Have they even now a bill ready? If not, we would advise the Governors to take the matter into their own hands, and elect a new committee of management pledged to reform.

London Houses.—In an article respecting the imperfections of the Metropolitan Building Act, the *Daily News* draws attention to two causes of the insalubrity of some London dwellings which ought to be provided against in any future legislation. The first is the growing practice of carrying up houses to such a height in narrow streets, as effectually to cut off all sunshine from the opposite side. In as much as the value of land in London is continually rising, it is not unlikely that this evil may increase to an unexpected extent. But can nothing be done to provide for greater width of thoroughfares? at least, in the suburbs, some regulations might be enforced. The second complaint urged by the *News* is the scandalous practice of speculative builders, who excavate the gravel or other foundation to sell, and then fill up with "made ground," the compound that results from sticking up a board with the inscription "rubbish may be shot here." The emanations from the refuse which forms the foundation of many a pretentious villa must be injurious to the health of the inhabitants, and we should be very glad to see the builders prevented from thus acting.

Edinburgh Houses.—The *Courant* of Edinburgh has commenced a series of revelations of the present condition of the homes of the poor in the northern capital, which cannot fail to do good. Few, besides medical men, are aware of the squalid misery in which, in all our great cities, the poor pass their lives. We sincerely wish the *Edinburgh Courant* God-speed in this useful crusade.

Vivisection.—We observe in the March number of *Belgravia*, the magazine recently started by Miss Braddon, a very sensible article on vivisection, by Dr. Scoffern. It is written in so strictly argumentative a manner that no one can possibly object to a single paragraph, as likely to wound the susceptibilities of the French. Everything like indignation is carefully excluded, and even the concluding sentence, which consists of an illustration of how a distinguished hospital surgeon prepared himself in the dissecting room for a difficult and unusual operation, by practising on dead subjects, is toned down to a bare matter of fact—its truth and human interest alone supplying the one sentiment of the paper. It is quite unnecessary for us to give Dr. Scoffern's argument. We do not defend the atrocities perpetrated under the name of vivisection. On account of its character we hope this common sense statement of Dr. Scoffern's will be translated into French, and widely circulated in France, where we think it would receive the attention it merits.

Female Doctors.—The Society of Apothecaries of London has issued a notice that in future no certificate of attendance on lectures will be received unless such lectures have been delivered before the classes of a recognized school of medicine. The lady aspirants for the license must, therefore, abandon their notions, or pass through the course of dissections, &c., in company with students of the other sex—a thing a lady could not be expected to do. The regulation is, in fact, expressly designed to exclude females.

Worse than Gregarines.—Our readers last week had an opportunity of seeing to what extent the writers of sensational paragraphs may go. A contributor to the *Lancet*, as if in very sport at the alarm already created, has had the audacity to out-Herod Herod. After showing his erudition respecting the *pediculus*, and dwelling on the "ill effects of the artificial practices of adornment, which are supposed to enhance the conventional beauty of the fair sex," he goes on to assert that "many ladies carry about with them in their 'chignons' the seeds of ringworm." Nor is this all, for this remorseless writer adds, "that there is in our markets a novel species of false hair called 'church-yard hair,'" consisting "not only of the shafts but the roots also," and obtained, as the name implies, "from the scalp of the dead." We should be glad if this revealer of horrors would inform us whether his budget is yet empty.

Payment of Medical Officers in Dublin for Cholera Services.—Our observations last week on certain remarks, which were attributed to a guardian of the North Dublin Union, have elicited from that gentleman a reclamation, which we think it necessary to notice. The phrase of which we complained was :—

"If I desire to entertain my friends frequently, I don't think it neccessary to pay *my servants* extra for their attendance, nor do I see why our doctors have any right to claim special payment."

The gentleman declares that he made use of these words in reference to the porter of the Green-street Hospital, and not to the medical men. We beg to observe that the words used occurred in the course of a discussion on the question of payment of the medical officers which was the only business for which the guardians were summoned to consider on that day; and, we cannot conceive, how the question of the porter could have intruded into the matter, unless perhaps that functionary were grouped with the doctors. That the attributed significance was attachable to the gentleman's words, whether it be intended or not, we have the authority of a guardian present for saying that he and others were under the impression that the words were intended to apply to the doctors. We are, however, glad to have elicited the denial of the gentleman to whom the phrase was attributed, and we hope we may accept it as an acknowledgment of the bad taste of such a tone of remark as applied to educated officers of the Union.

In connection with this subject we have to inform our readers that the letter of the Poor-Law Commissioners in favour of the extra remuneration of the medical officers, which appeared in our last, was since under the consideration

of the Board. It was moved by Dr. Brady, that the remuneration be at the rate of three guineas a-week, but we regret to observe that his suggestion was not accepted, and the previous niggardly offer of the Board was affirmed.

Unfortunately the Board, in their policy, cannot obtain credit even for the very limited virtue of economy, because they have not extended their principle to all their officers. While they refused to recognise the services of their dispensary surgeons, they voted not only their thanks, but a more valuable honorarium of £50 to their apothecary, Mr. Tate, whose duties in the cholera epidemic were infinitely less onerous than those of the medical officers. That gentleman received no more than his due, but the vote exclusively to him shows that the parsimony of guardians may relax under peculiar circumstances.

Medical Choral Society.—We observe with pleasure a notice of the Medical Choral Society of Dublin, which appears in our advertising columns to-day. The Society inaugurates its existence under very favourable auspices, especially as regards the countenance which it has received from the senior members of the profession and teachers in the Dublin School. Next to strictly professional employment, it is of great importance that students in our profession should enjoy every opportunity of devoting themselves to such desirable pursuits as music, and any amusement which may divert their leisure from the streets ought to be met with the most anxious assistance by those who have the status of the rising generation of the profession at heart. There is, we believe, an ample constituency for a flourishing society, and we can venture to anticipate that its members will be no worse surgeons and physicians, and will certainly be the better gentlemen for their connection with it. It is neither desirable nor possible to make all medical students professional "stews," and they can dilute their professional business with no better ingredient than an evening's glee singing.

Proceedings of Societies.

SURGICAL SOCIETY OF IRELAND.

Friday, February 15, 1867.

Dr. Butcher, President of the College, in the Chair.

The President said that an important question had been submitted to three members of the Society on the last occasion of their meeting—namely, to ascertain the constituents of a salivary calculus. He now called upon those gentlemen to submit their report.

Dr. Mapother read as follows:—

Report of the Committee as to the Chemical Constitution of the Salivary Calculus presented to the Society by Dr. Leech.

"One-third of the portion given was heated in the flame of a spirit-lamp, when it blackened, and emitted the burnt-feather smell characteristic of the nitrogenized compounds. Its organic matter was, therefore, presumably, dried mucus. By further heat the mass became white, the carbon being oxidised, and the ash was alkaline from lime. By complete incineration the loss of weight was one-twelfth.

"The inorganic constituents were carbonate of lime and phosphate of lime, respectively, in the proportions of two-thirds and one-third. The quantity being so small, an exact quantitative determination was not attempted, but the percentage may be roughly stated as follows:—

Carbonate of lime	60
Phosphate of lime	30
Organic matter (probably mucus) .	8

"The remaining portion was boiled in distilled water, and the liquor was tested on a white slab with persulphate of iron. No trace of sulphocyanide of potassium appeared."

In another submaxillary calculus which I examined in 1863, there was no carbonate of lime.

The compositions of those analysed by various chemists are as follows:

	Wright.			Von Bibra.	Lecanu.
Carbonate of lime .	81	79	80	13	20
Phosphate of lime .	4	5	4	38	75
Soluble Salts . .	6	4	5	38	5
Animal matter . .	7	8	8		

Those from the horse contained:

	Lassaigne.	Henry.
Carbonate of lime . .	84	85
Phosphate of lime . .	3	4
Organic matter . .	9	2

No analyst mentions that sulphocyanide of potassium was present, which, even if originally present, would dissolve out in the fluids of the mouth. It will be seen from the above widely diverse analyses, that concretions deposited from saliva differ almost as widely as those formed from urine, at least with regard to the proportions of their constituents.

Dr. Mapother likewise added, that he understood Dr. Jameson possessed two salivary calculi, and perhaps, if he had brought them down with him that evening, he would kindly let the Society see them.

Dr. Jameson said he had brought the specimens with him, having heard that such a subject would be before the Society. They were two very excellent examples of salivary calculi. One was extracted by himself from their old friend Jerome Morgan. He had been suffering a great deal of distress and inconvenience from a swelling in the sublingual region. He (Dr. Jameson) cut down on it, and extracted this calculus. He had a part of it analysed, but he forgot with what results. The other specimen was also a very beautiful one, and had been extracted from a similar situation under the tongue. There was a regular ball and socket joint formed between the two portions of the calculus. This specimen was given him by Mr. Edward Dillon, the demonstrator, a few days after he (Dr. Jameson) had extracted the calculus from Dr. Morgan's sublingual region.

Dr. Leech said the calculus he removed had a ball and socket joint also, and likewise a nucleus.

Dr. Jameson observed that there was a nucleus in the centre of the calculus which he had extracted.

The Chairman said they had to thank the gentlemen who had made the analysis of Dr. Leech's calculus. The sulpho-cyanide of potassium was not detected, in the first instance, by the gentleman who analysed a very small portion of the calculus. A doubt having been thrown out whether that peculiar salt might not have escaped his observation, a larger portion was kindly given by Dr. Leech, which having been subjected to examination by three most competent analysists, the original analysis was confirmed. The specimens shown by Dr. Jameson were very typical ones. The largest of them did not, however, approximate to the size of that exhibited by Dr. Leech. He had, himself, seen specimens very nearly as large as it. He thought when the calculi arrived at a certain size they were broken by the motion of the tongue, and the ball and socket joint was then formed by the movements of that organ.

Treatment of Certain Diseases of Bones and Joints by the Deep Introduction of Caustic.

Dr. Frederick Kirkpatrick spoke as follows:—Mr. President, I am anxious to bring under your notice this evening, for the consideration of the members of the Surgical Society, a subject which has for some years engaged

my particular attention—namely, the treatment of diseases of the bones and joints by the deep introduction of caustic, combining and extending its action by means of incision, so as to bore down to the seat of the disease, into the cancellated structure of the articulating extremity of the joint, in the incipient stage of disease, or into the joint itself in the more advanced periods. I do not, sir, by any means wish to make light of those great achievements of conservative surgery which have so interested and engaged the profession of late years, or to utter one word in depreciation of the operations for excision of joints, those difficult and heroic operations which must always be honourably associated with your name. But, sir, the treatment which I have the honour to bring under your notice this evening has been attended with so great a measure of success in my practice, that I feel warranted in pressing it upon the notice of my professional brethren, and in requesting that they will give it a fair trial in their hospital practice. Great numbers of patients afflicted with diseases of the bones and joints are admitted into the North Dublin Union, and of late years I have been enabled to devote myself to the carrying out of this mode of treatment, as I have been relieved from the general charge of the establishment, and have only to visit a few wards set apart for curable surgical diseases.

Sir Benjamin Brodie, in his great work on this subject, states that those diseases originate in the cancellous structure of the bones, and he describes the incipient morbid condition as "a preternaturally vascular state of the bones, the presence of a reddish fluid mixed with medulla in the cencalli, and a deficiency of earthy matter." I would wish to add to this the further statement, that this diseased condition at its onset commences very near to the surface, and quite accessible to our reach, as it is in general produced by a fall or some external injury. But, sir, nature has so firmly encased those projecting extremities of the joints by means of a firm periosteal membrane, a condensed cellular tissue, and great thickness of the integument, that when matter is formed it never can make a direct exit, but either forces its way into the cavity of the joint, or takes a sinuous and often distant course through the muscles to the surface. Now, Sir Benjamin Brodie further states that this morbid condition which precedes ulceration and abscess is not to be relieved by local remedies, and he says that an opening is not to be made when much substance intervenes, but directs you to wait for thinning to take place.

Notwithstanding this great authority, I am bold, sir, to declare that this is the very time for successful interference on the part of the surgeon. The mode of operation which I propose is simple, and only occupies a few moments. The patient having been placed under chloroform, the deep boring of the diseased articulating extremity is effected by the alternate use of a small strong knife, and a piece of the potassa c. calce slightly pointed and moistened with proof spirit. A funnel-shaped deep hole is formed after a few days, which is attended with very little pain or surrounding inflammation, and if the disease is attacked in the early stage, healing from the bottom takes place with great rapidity, and the disease is often cut short by the single operation. On the other hand, if the softened structure is not sufficiently opened up by one perforation the process is to be repeated in a few days, either using the solid caustic or the potassa c. calce in powder, introduced with a piece of pointed wood. If this is not sufficient, a counter opening must be made at the spot where softening of the bone is indicated. There is no limit to the depth that can be reached in this manner, and in one instance I passed a catheter from one aperture to the other completely through the bone. I will now read for the Society two cases selected on account of the very rapid cures that follow this plan of treatment :—

John Corbet, aged 11 years, of delicate aspect ; three of his brothers and sisters had died, and his father had been carried off by cancer at 41 years of age.

For twelve months he had been disabled by disease of the right hip, and had been in two hospitals.

The hip-joint was unaffected, but the great trochanter was tender and manifestly diseased.

A large abscess existed at the back of the thigh towards the inner side.

On the 8th of May I opened the abscess with incision and caustic. During the next month the discharge was so profuse, and the child was so rapidly running down, that I decided on boring the trochanter, notwithstanding the very unfavourable constitution I had to deal with.

On the 15th of June, having made the surface insensible with ether spray, I made an opening and bored the softened structure of the bone fully to the depth of an inch. A round funnel-shaped opening was formed after a few days poulticing, and a free and healthy discharge followed, with an immediate reduction of the flow from the sinus in the thigh. It was only necessary in this case to repeat the caustic once, and on the 15th of July, one month from the application of the caustic, both apertures were perfectly healed. There has been no recurrence of disease in the vicinity of the joint since.

Patrick Howard, a healthy robust man, aged 28, by occupation a cab driver ; admitted into hospital with disease of the joint between the first and second phalanx of the middle finger. The finger was red, swollen, and painful, and measured an inch more than the corresponding one of the opposite hand at the centre of its dorsal surface; a fungus protruded with an opening in the middle leading directly into the cavity, from which there was a free discharge. There was lateral motion, distinct grating, and acute pain complained of, and the articulating extremities touched by a probe were found denuded of cartilage.

The history he gave was, that he was bitten by a woman in a street row, and the joint opened seven weeks before admission ; that he continued to drive his cab until his hand became so painful and useless that he had to relinquish work and seek admisson to hospital.

On the 9th of January he was placed under chloroform ; the projecting fungus was destroyed, and the caustic freely entered into the joint ; the knife being used, laterally, to facilitate the proceeding. Some of the powdered potassa c. calce was also rubbed into the diseased cavity with a small piece of pointed stick, round which cotton was rolled, so as completely to destroy the diseased membrane lining the joint.

On the 12th the swelling was much abated ; skin of the finger pale and wrinkled to the edge of the slough ; pain entirely gone.

On the 14th, a clean granulating cavity was exposed, which was dressed from the bottom with dry lint.

On the 20th, healing was so much advanced that adhesive strapping was applied, and on the 26th, the seventeenth day from the introduction of the caustic, he was discharged to his work with a stiff finger, a very small cicatrix marking the surface where the caustic had been so freely applied.

The PRESIDENT said the point laid down was one that would admit, he thought, of discussion. If you can rescue a joint, as Dr. Kirkpatrick had done, either from amputation or excision, that was a complete triumph of conservative surgery, and they all knew well the meaning of that word. Any observation coming from so practical a surgeon must meet with deserved attention. The point raised was one perfectly novel, and it required their careful consideration. If by this treatment early adopted they could rescue a limb from excision or amputation, a great service would be rendered to the patient. Excision had its own class of cases to which it was specially applicable, and the great mistake in the profession was endeavouring to make excision take the place of amputation. It could not do so. If the mode of treatment proposed by Dr. Kirkpatrick was sustained by the test of experience, and shown to be free from the risk of danger to the life or limb of the patient, it would be one of the greatest improvements in surgery which the present century had brought out.

Dr. KIRKPATRICK observed that there was no limit to the depth to which they might go with his operation. He had passed a catheter quite through the tibia. He first used the ether spray, then made the incision, and then

passed in the catheter, and after that the opening could be made as large as he pleased. After half an hour the patient suffered no pain. He had a horror of tetanus following, and ever since he commenced this practice he had given a nightly dose of opium until all danger was over.

Mr. Collis should not delay the meeting by repeating what the President had said, that this mode of treatment might supplement what seemed to be wanting, both in excision and amputation. These had their proper places, and what was wanted was an early treatment of an early stage of bone disease. Many years ago he was struck by a case under Sir Philip Crampton's care, in which the bones of the carpus were much diseased. He made free and bold incisions, and allowed the inflammatory products to drain from the bones. The result was that the bone cicatrised, and the man recovered and had the perfect use of his wrist. He had seen that man many years afterwards, and he was able to use his hand with perfect freedom. If they studied the situation in which these inflammatory accidents occur, they would find, as a rule, that the part generally inflamed was the dense subcartilaginous layer of bone—the part that lies immediately in contact with the cartilage. As soon as this was inflamed the cancellated structure below became softened and undermined. The products of inflammation found a difficulty in escaping. He had for a good while thought that the proper treatment for this disease would be the trephining of the head of the tibia when the knee was affected. The site of selection was the inner condyle of the tibia. However, as Dr. Kirkpatrick's treatment was less severe than trephining, it deserved attentive consideration and a fair trial. It was not empirical, although proved by experience. It was founded on sound physiological and pathological considerations, and it was one which, if it emanated from that Society, would tend to add to the laurels which the Society had gained by the noble improvements in surgery—especially in the treatment of joints—which had emanated from it.

Mr. B. W. Richardson observed that, if he did not mistake, the same principle of treating the diseased bones of joints had been followed by Chassaignac for some years. It appeared to him (Mr. Richardson) that the object of Chassaignac and Dr. Kirkpatrick was the same, although produced in a different manner; the former being in the habit of using drainage tubing, &c.—Dr. Kirkpatrick, caustic. He (Mr. Richardson) recollected having a conversation some time since on the subject, with the Rev. Professor Haughton, during an excision of the knee-joint by Dr. Barton, in the Adelaide Hospital. Dr. Haughton told him (Mr. Richardson) that he had seen, in Paris, diseased joint-bones, through which Chassaignac had passed drainage tubing, and with excellent results.

In confirmation of Mr. Richardson's observation,

Mr. Edward Hamilton stated that he had seen Chassaignac pass drainage tubes through diseased tarsal bones when he (Mr. Hamilton) was last in Paris.

IDIOPATHIC GLOSSITIS.

Mr. Croly stated—At the meeting of the Surgical Society held on the 18th of January, I had the honour of reading a communication on acute glossitis, illustrated by seven cases, which occurred in my own practice. By a curious coincidence, I have had (since bringing the subject under the Society's notice) another case of idiopathic inflammation of the tongue under my care in the City of Dublin Hospital. The patient was seen by most of my colleagues, and also by several medical friends. I shall, as briefly as possible, detail the history of the case, which was one of unusual severity:

About eight o'clock on the night of the 23rd of January, I received a letter from Mr. David Hadden (one of the resident pupils in the hospital), requesting me to visit, as quickly as possible, a girl just admitted, who was suffering from urgent dyspnœa and symptoms of glossitis.

On arriving at the hospital I found a girl sitting up in bed, suffering from alarming dyspnœa. Her tongue filled the entire cavity of her mouth, and its convexity almost touched the palate. Saliva poured copiously from her mouth: her head was thrown back; her countenance was anxious, and she breathed entirely through the nostrils; pulse 120 in the minute. She could not speak. I ascertained, on examination, that the region of the tonsils of each side was free from swelling, and not tender on pressure. The submaxillary region, however, was enlarged, and very sensitive to the touch. The girl could not bear any pressure on the apex of her tongue, which protruded between the teeth, and was covered with a white exudation. The breath was fœtid. There was no tenderness of the gums, and the patient had not taken mercury or any other medicine lately.

The girl's mother states she was in good health until the 17th of January, when she caught cold by taking off her boots and walking in the snow. She complained of *shiverings, headache, thirst, and soreness of her tongue.* She was menstruating at the time, and the discharge was checked.

It was to me quite evident that she was suffering from acute glossitis of a very severe form, and from the aggravated symptoms I felt most anxious about her. I lost no time in introducing a sharp-pointed curved bistoury into the mouth, keeping its blade flat towards the tongue until its point reached the base of the organ, and then, having turned the edge of the knife towards the tongue, made a rapid, deep longitudinal incision between the raphe and edge, and parallel to the septum. I quickly changed the bistoury to the other side, and made a similar free incision. The hæmorrhage was copious.

The relief to the breathing was almost immediate. I directed three leeches to be applied to each submaxillary region, and a hot poultice put on when the leeches came off. The patient tried to swallow some milk, but could not succeed. She took ice in small pieces, and enjoyed it very much. A turpentine enema was administered, as the bowels had not acted since the commencement of the attack.

24th. Mr. Hadden's note says: Patient had a restless night; she swallowed a little wine-and-water with difficulty, and continued the ice; bowels were freely moved; countenance less distressed, and the breathing not so difficult.

Six P.M. On visiting the patient I found her symptoms not as much relieved as I had anticipated, and as the tongue was still very much inflamed, I made incisions again into the organ in the same situation as the previous ones. A large quantity of blood escaped, and as she could not swallow, I ordered nutritive injections of beef-tea and whisky to be administered every third hour.

Eleven P.M. Breathing much less difficult; the girl could speak a little; her voice, heard for the first time since admission, was peculiar, and the speech "thick" and indicative of the disease; pulse 112, and stronger.

25th. Patient slept tolerably well last night; she can swallow a little, and still enjoys the ice; nutritive injections continued.

26th. Pulse 100; saliva still flowing freely from the mouth.

27th. Tongue still much enlarged, and protrudes beyond the teeth; the patient cannot swallow enough of nourishment to keep up her strength. Ordered nutritive injections every hour.

28th. Pulse stronger; patient swallows a little iced milk; white exudation is separating from the tongue.

29th. The incisions, so far as they can be seen, are mere lines; the edges of the tongue are deeply indented from the teeth; the *hardness and enlargement consequent on the effusion of lymph still remains.*

Mr. Croly proceeded to say that, on the last occasion when this subject was under discussion, he mentioned that the first case described by him coincided with those published by Dr. Fleming, where the disease commenced under the chin. In the next case half the tongue only was affected; the third case involved the whole tongue; the fourth case only half the tongue; the fifth case the entire organ; and the last case arose from erysipelas. He (Mr. Croly) considered that the case which he brought before the Society that evening was a typical case of glossitis; and he was

certain that if the tongue had not been cut freely and deeply, the trachea should have been opened to save the girl's life. Whatever the case might be termed, it required leeching and a free incision. The tongue swelled so much, that the upper teeth were embedded in it, leaving holes one quarter of an inch deep which any of the members could see if they pleased, as the girl was in attendance for that purpose.

Merrion-street.

DEAR CROLY,—I read your cases with interest, and have no doubt that the term "glossitis" applied to them is quite correct. They (the cases) are obviously identical in character with those to which you allude as described by myself some years since. Why the term "glossitis" is objected to is not, I think, very clear; and it appears to me that dissentients are *bound to state the distinctive* characters which THEY assign to genuine glossitis, *as contrasted with the phenomena* of the cases related by you and myself. In *our* cases we have an affection arising suddenly, running a rapid course, attended by pain, swelling, tenderness, and increased vascularity of the organ engaged, and frequently followed by abscess—the latter not uncommonly in the substance of the tongue. The disease finally is arrested by the same measures which are efficient in inflammation. I do not, therefore, feel myself authorized to resort to hair-splitting, and to refuse to place the disease in the category of inflammation, merely because authors assert that acute glossitis is rare. I well recollect a similar case, many years since, in the hands of Sir P. Crampton, who did not hesitate to *call it glossitis*, and to treat it as such.—Yours, sincerely,

T. J. GEOGHEGAN.

Dr. H. J. Croly.

Dr. FLEMING stated that he adhered to the original observations which he made in his paper, but which he had not read for a long time. That paper was based on cases which had fallen under his immediate observation, and, with respect to those cases, he commenced by saying that there were two forms of glossitis—one idiopathic, the other symptomatic. He mentioned the treatment applicable to idiopathic cases, which, he repeated, were cases of extremely rare occurrence. With respect to the cases of symptomatic glossitis, such as traumatic, or arising from other causes, he had mentioned the treatment suitable for them likewise, and their characteristic symptoms. If he made any remarks on the last evening as to accuracy in diagnosing the disease, they were as much applicable to himself as to others, for even the best of us might be mistaken. As to affections of the tongue that were confounded with glossitis: there were affections of that organ which suddenly supervened, but that wanted some of the true symptoms. Sometimes the tongue swelled suddenly, and the swelling would as suddenly subside, unaccompanied by fever, and supervening as suddenly as they found these sudden congestions occurring in other situations. If they analysed the case brought before them that evening, he had a little doubt in his mind whether it was a case of "idiopathic" glossitis. It was stated there was a sudden suppression of the catamenia. That might have produced this sudden congestion of the tongue, and might have produced all the symptoms. He should be disposed to call it a case of symptomatic, rather than idiopathic glossitis. His object was to elicit information, and he acknowledged that he always derived more or less benefit from the discussions which took place at that Society.

Mr. PORTER thought that Dr. Croly was justified in coming forward and explaining the case, as he had now done, so plainly. He (Mr. Porter) had not the slightest doubt, from his description of the case before the Society, that it was one of glossitis. It was not a common disease. He never saw but one case of idiopathic glossitis, and that was under the care of the late Dr. Graves. He had seen some severe cases of swelling of the tongue. One of the most severe he had ever seen was shown him by the late Dr. Lagrange, and it arose from the sting of a wasp.

Dr. WHARTON said he visited the hospital at Dr. Croly's request, to see the case, and no doubt whatever the tongue presented all the signs and symptoms of abatement of an acute attack of inflammation. The impression of the teeth was left very deeply indented in the tongue, showing how great the swelling and consequent pressure must have been. He admitted the disease was a very rare one, but had no doubt this was a case of glossitis.

Dr. BENSON saw the case also, and concurred in the opinion that it was one of acute glossitis. As to attributing it to the suppression of the menses that was out of the question. No one ever heard of a swelling so enormous, and accompanied with fever and pain, arising from such a cause.

Mr. FLEMING observed that he feared he had been misunderstood. He did not deny that the case was glossitis, his impression, however, being that it was symptomatic, and not idiopathic inflammation of the tongue.

Dr. O'GRADY said that he had seen the case, and had no doubt it was a most urgent case of acute glossitis.

Mr. CROLY—This case was admitted to hospital without any previous history. He took it as he found it—a case of enormous swelling of the tongue, filling the mouth so closely that he had to pass in the bistoury flat in order to make the incision. The girl had no wound of the tongue; therefore, it could not be traumatic; it was not likely to have arisen from the sting of a bee at this season, and as to suppression of the menses he thought that was only a coincidence. He mentioned the circumstance because it was told to him, not because he thought it had any influence in causing the disease. The mother's history of the case was that the girl caught cold, shivered, and felt unwell. The class of people to which she belonged often attributed affections to suppression of the menses, and she mentioned that circumstance, but he did not attach any importance to it. The tongue did not swell rapidly; the case began with pain in the tongue, then difficulty in swallowing, and so went on until she came into hospital with the organ enormously swollen, as he had described. He was perfectly satisfied that the girl would have lost her life if an incision had not been made.

Mr. B. W. RICHARDSON read the following paper by Dr. Johnson of Kilkenny:—

CASE OF PROTRUSION OF INTESTINES THROUGH AN ABDOMINAL WOUND, ENDING IN RECOVERY.

By ZACHARIAH JOHNSON, A.M., F.R.C.S.I.

Wounds and injuries of the great cavities must always present unusual interest to the surgeon, on account of the great importance of the organs contained within them, and unavoidably implicated or endangered. The following case of protrusion of the intestines through an abdominal wound, and ultimate recovery, will not, I hope, prove uninteresting or uninstructive:—

On the 8th of September, 1865, a farmer, named Thomas Maher, when on his way home from market was wounded in the abdomen with a knife or dagger by one of his companions. He almost immediately felt the bowels protrude. He was carried at once to a police barrack, which was scarcely more than a quarter of a mile distant. I saw him between eight and nine P.M., about an hour and a half after the injury. He was greatly alarmed, but not suffering as much as might be expected from prostration or pain. On opening and removing his trousers nearly all the floating and movable intestines were exposed to view. The first impression was that the wound, through which they had escaped, must be a very large one. The intestines were intensely vascular, of a vermilion hue, partly from exposure to the air, and partly from rubbing to the rough material of a coarse trousering; they were also much distended with gas. From the appearance of the viscera, it was hard to think that inflammation of a formidable character would not ensue, although the distended condition of the protruded bowels favoured the conclusion that they had escaped perforation. He had lost a considerable quantity of blood, but at this time there was little or no bleeding.

I proceeded at once to replace the intestines, but found the wound not at all so large as I had expected, judging at first from the great mass of intestine which was exposed to view. I found very great difficulty in restoring the bowels to their natural position, and it was only by manipulating patiently for a very long time that I succeeded, inch by

inch and bit by bit, in getting them back into the abdomen. A piece of omentum, which could not be got to return into the cavity, had to be excised. The wound was found not to be at all as large as at first supposed. It was rather less than two inches in length—rather oblique, and to the left of, and a little below, the umbilicus.

The edges of the wound were now brought into apposition, and firmly secured by several strong interrupted sutures, an ample compress placed in front of them, and secured in its position by large adhesive straps, and a broad roller firmly applied over all.

The sutures were effectual in preventing any further protrusion of the bowels, although it was difficult to prevent it until their insertion.

He was now placed in the police sergeant's bed, and given a full opiate, with directions to observe strict quiet, and abstain from all food and drink. The abdominal muscles were relaxed by raising the head and shoulders, and placing a cushion under the knees, and this position he was ordered to observe until seen again.

I saw him early on the following morning in the police barrack. He had passed a good night, had some sleep, and was free from pain. His condition was altogether so favourable, that I advised his removal into the county infirmary, a distance of about two miles from the barrack.

He was carried carefully on a stretcher, and not allowed to make any effort or exertion whatever. He did not suffer in any way by the move ; the full influence of the opium being kept up all through. Free doses of opium were now given at such intervals as the circumstance called for. Pills with grs. ij of the pulvis opii were at first given on every threatening of pain, which were gradually reduced in quantity as the danger of inflammation decreased. He was allowed the smallest possible quantity of food and drink.

It would be unnecessary to enter into a minute detail of symptoms and treatment from day to day. The case progressed favourably, and at no time did the dreaded peritonitis set in. The same principles of treatment were observed throughout, only modified in degree, as the danger became more remote. The doses of opium were gradually lessened until their use was left to the promptness of discretion or pain. Milk and light farinaceous food was allowed in quantity progressively increased.

No atttempt was made to interfere with the action of the bowels, which remained torpid for several days, but then acted spontaneously and naturally, affording additional evidence of the satisfactory progress of the case, and absence of those lesions and complications which there was such great reason to apprehend at first.

The sutures were not disturbed for several days, and then only one by one, as each appeared to irritate or cut its way through the involved parts. Strong and ample straps of adhesive plasters, supported by compresses, and a broad abdominal bandage, formed the only guard against escape of the intestine on the removal of the last suture. At no time, however, after the insertion of the sutures did any portion of the abdominal contents escape, and the wound closed in gradually, healing from the bottom until the process of cicatrization was complete.

This man left hospital about a month after the injury in perfect health, wearing an umbilical truss over the site of the wound, as a measure of precaution. I saw him several months afterwards ; he was then in perfect health, and continued to wear the truss, but only as a precaution, as he was unconscious of any inconvenience or evil consequence from the wound in the abdominal walls.

I have ventured to offer these particulars of this case, although aware there are several on record equally striking and remarkable, where recovery followed on extensive protrusions of the abdominal viscera through wounds more or less extensive in the abdominal parietes. The addition of one such to those already recorded, with a detail of the treatment which conduced to a result, successful beyond all reasonable anticipation, may not be wholly useless, as tending to confirm the line of practice suitable in such cases, and will, at least, be reassuring to the young surgeon, should he ever meet with such a formidable accident.

I would here add, that at first small doses of calomel were combined with the opiate pills. This was done in the expectation that peritoneal or enteritic inflammation would almost surely follow on the violence which had been sustained by parts of such delicate organisation, and with the view of being able to bring the patient readily under the influence of the mercury, should it become necessary to do so. However, so favourable was the progess of the case, that the mercury was very soon omitted, and the event entrusted to the salutary influence of the opium alone.

At no time was it necessary to resort to either general bleeding or leeching, but it should be remembered that he lost a good deal of blood before he received any medical assistance.

The difficulty of getting back the intestines was so great, that for some time I almost despaired of being able to do so without dilating the wound—a measure to be avoided, if possible, for many obvious reasons ; however, they were eventually restored to their natural position by the exercise of much patience and perseverance. But the intensely vascular condition of the intestines from exposure to the air, and friction with the coarse clothing of the patient, together with the amount of tedious manipulation to which they were subjected, made it a matter of surprise that formidable inflammation did not follow, and still more so that recovery should have been attained without any of the dangerous consequences which, at first sight, seemed almost inevitable.

The President thought the society ought to be much obliged to Dr. Johnson for sending them the history of that important case. None knew better than those around him how frequently Surgeons met with these serious accidents, and also the difficulty in restoring the parts, protecting them, and saving the patients' lives. This case was admirably detailed, and the result was most fortunate.

Mr. Porter said that one important feature in the case was the amount of handling and inquiry to the intestines without any serious consequences. They knew, in the present day, when ovariotomy was performed so frequently, the Surgeon endeavoured to deal with the intestines as delicately as possible. Here was a case where they were exposed to friction and to exposure to the air, and yet the patient had recovered.

Mr. B. W. Richardson remarked that it was wonderful what the intestines would sometimes bear with impunity. It was only that morning he had been speaking to Professor Sinclair on the subject and who mentioned a case quite confirmatory of those alluded to by Dr. Johnson. It occurred in the practice of Dr. Shekleton, a former master of the Lying-in-Hospital. A French prisoner was brought to Dr. Shekleton after one of the battles in the Peninsula, where Dr. S. was then serving. The man had a large, dark, nearly black, pedunculated protrusion through the anterior abdominal wall. On examination, the tumour was found to be covered with dirty adherent charpie, which, on being carefully removed, disclosed a large mass of intestine of a nearly black colour. Further investigation led to the discovery of a ligature which tightly constricted the neck of the protrusion, and which had been placed there by some person, whether professional or otherwise he was unable to say. Dr. Shekleton cut and removed the ligature, and a careful examination having led him to think that the intestine was not dead, and had a chance of recovery, he returned it into the abdomen, and secured the apposition of the edges of the wound of the abdominal wall. The man subsequently made an excellent recovery, and was exchanged.

The President said this case tended to the same conclusion they had arrived at that night as to conservative surgery. Even in the worst cases of strangulated hernia, the surgeon was often astonished after returning the dark, almost black, intestines to find the patient recover, while often he would operate in a case not apparently so bad, and in which he had reason to anticipate a favourable result, and yet the patient died. He thought they should be much obliged to Dr. Johnson for his valuable paper, and

that they ought to encourage country practitioners who frequently meet with very interesting cases to communicate them to the society.

FURTHER NOTES ON ANATOMICAL IRREGULARITIES.

By Alexander Macalister.

It will be remembered that a few evenings since I exhibited to the Society a specimen of irregularity in the branches arising from the arch of the aorta, in which the two carotids arose by a common trunk, and the right subclavian, arising from the left extremity of the transverse portion of the arch, ran behind the trachea and œsophagus over to the right side. It is a curious coincidence that during the last week I have met with a second example of this same arrangement, differing from the former only in one respect—namely, that the arch exhibited no lateral inclination, but lay entirely to the left of the spine, its transverse portion passing directly backwards. The right recurrent laryngeal nerve, in this instance, did not wind round the subclavian—a fact which was commented on in connexion with the last described example.

I have met with another interesting arterial irregularity which might be of considerable surgical importance—namely, the origin of the internal or circumflex femoris vessel from the internal or deep epigastric, about half an inch above the origin of that vessel, from the external iliac. Burns has described an instance in which this vessel arose from the external iliac, and I have seen it coming off from the femoral (a very common arrangement), and when it comes from the profunda it is very frequently above the external circumflex. I have seen it likewise arising by a common trunk with the external circumflex, as Green has reported, but I have never before seen or read of instances of the variety.

I have likewise to exhibit a specimen of the extensor medii digiti, nearly separate from the indicator at its origin, but completely distinct for more than two-thirds of its course. This muscle has been occasionally noticed before, and Mr. Wood published an instance of the kind in the Proceedings of the Royal Society, June, 1864.

Another interesting variety consists in the presence of an extensor of the first phalanx of the hallus, separate from the long extensor of the great toe. This muscle is one of common occurrence, generally is only attached to the annular ligament, or to the lower sixth of the tibia; sometimes it extends higher up. I have seen it merely a slip springing from the extensor hallucis longus proprius, or as a tendon with no muscular fibres attached. I have seen, but much more rarely, an extensor ossis metatarsi hallucis, and once found the three slips to coexist as in the thumb.

In the third specimen on the table, the palmaris longus will be seen to present a moderately thick fleshy belly for seven inches of its central portion, with an inch and a half of tendon at its origin and at its insertion.

Correspondence.

QUACKERY TRIUMPHANT.

TO THE EDITOR OF THE MEDICAL PRESS AND CIRCULAR.

Sir,—With your permission, I would again wish to say a few words on the subject of the above social evil, and this for two reasons, in the first place with the intention of bringing the subject under the notice of the profession through the instrumentality of your columns, and thus indirectly of the community at large, in the hope that it may at no very distant day engage the attention of Parliament; and secondly, as I consider quackery to have arrived at a new and greatly advanced phase since I last had the honour of adverting to the subject in the pages of the Medical Press and Circular.

I shall first treat of the second proposition, viz.:—That quackery has made giant strides within the past six months, as evidenced not only by the numbers, but audacity of the individuals concerned therein.

If the proverb be true, "that the darkest hour comes immediately before the dawn," verily we must be on the eve of a most luminous period in medical science! for I am of opinion, that the gloomiest days of medicine could not boast of any, thing like the numbers of vile pretenders to medical knowledge which swarm around on every side at the present time—even in the enlightened metropolis of Ireland; in proof of which let any one glance at the pages of the *Irish Times* during the past few weeks, in which I have counted during one week no less than *forty* advertisements emanating from obscene confidential quacks, native and imported—a marked feature in most of which is, that these sapient and philanthropic individuals state that they have discovered how to treat successfully all diseases of the nervous system *without medicine*, in a few days—albeit they insert their ability and willingness so to do in the department styled "Medical." By this "wonderful medical discovery" the modern quack (of the past six months) has shown himself, a vast improvement on the antiquated animal who formerly was at least obliged to cure the disease by levelling a pill at the part affected; but, forsooth, all these medical cures must now succumb to the enlightened discoveries of philanthropic individuals, who, for the mere consideration of *two penny stamps* can thus dispense immediate health and happiness to all willing to accept it! Witness the following—extracted from the *Irish Times*:—

"Just Published, post free for two stamps.—Wonderful Medical Discovery, demonstrating the true cause of nervous, mental, and physical debility, lowness of spirits, indigestion, want of energy, premature decline, with plain directions for perfect restoration to health and vigour—Without Medicine.—Sent free on receipt of two stamps, by W. Hill, Esq., M.A."

So much for specimen number one. Now for number two, which, if not emanating from the same worthy and enlightened discoverer, I think *he* should put his "M.A." knowledge to work, and make a further discovery of the piratical individual who seems to have appropriated his style at least. But perhaps I may wrong him, for "facies non omnibus una, nec diversa tamen, qualis debet eni sororum." (Extracted from the *Irish Times*):—

"Post free for two stamps.—The Masterpiece of Medical Science.—The new discovery for the self-treatment and cure of physical debility, pains in the back and limbs, nervousness, impaired sight and memory, and premature decay, without medicine.—Sent free on receipt of two stamps, by G. Clinton, Esq."

In the following, the sapient author seems not to have arrived at so high a standard, though discovering much, as to be able to cure all diseases *esse medicina*. (Extracted from the *Irish Times*):—

"Just published, post free for two stamps.—Grand discovery in medicine.—Read the Secret Friend, a new medical guide for the cure of nervousness, indigestion, physical debility, lassitude, and all other cases requiring confidential advice, arising from injurious habits, &c. This valuable work will be sent free from the author's residence, secure from observation, on receipt of two stamps. Address Dr. J. A. Barnes, ——."

Calculated as the above undoubtedly are to entrap the unwary and thoughtless, I consider the following to be of a much more pernicious tendency, appearing, as it does, in the *Irish Times* of January 12th, et sequentia, *immediately before* the "leading article," thus *seeming* (I can hardly conceive that it *really does*) to appear under editorial sanction:—

"Nervous Diseases of Women and Children—namely, hysteria, spasms, fits, convulsions, and other forms of nervous affections, great and permanent benefit, even in the most hopeless cases, and a cure where this is possible may be confidently expected. Please to send a full, correct, and plain statement of the case as to the age of the invalid, the cause, symptoms, duration, &c., of the illness and the nature and effects of previous medical treatment for a reply to B. 485, Medical, office of *Irish Times* newspaper, Dublin."

Bearing in mind that the above specimens are only *a few* out of the forty quack advertisements appearing during the space of *one week*, in *one* of the Dublin newspapers, I think most persons will concur in the truth of my statement as to the great increase of this opprobrium to legitimate medicine; and consequently the very great bodily, social, and material injury to which both sexes are exposed to from this disreputable class of human vultures. But were confirmation necessary to prove the extent and wide-spread nature of this evil, I think the following amply sufficient, as it

not only shows the ready method by which the ensnaring advertisements of designing quacks can be imported into the bosom of the most respectable families, but also another form under which this proteau monster seeks to draw victims to its shrine—I think it worthy of insertion—About the commencement of the present year I observed individuals hawking, about the principal thoroughfares of Dublin, almanacks for the year 1867. Now, as this is a class of publications no one could conveniently do without, and the outlay to procure a "respectable looking one" though marked "three pence" was only "one penny." I observed numbers possess themselves of "The Dublin Household Almanack," and as it appeared "value for the money," I also bought one. On examination I found it to contain twenty-four pages, small 8vo, and of that number, the "Almanack" properly so called, occupied only twelve pages, exactly one-half, the remaining half being actually "crammed" with quack advertisements of every description, the less objectionable consisting of—Blair's gout and rheumatic pills; Frampton's pill of health; Hayman's balsam of horehound; Dr. A. Coffin's tricopherous; Morrison's pills, *to cure cholera*; Norton's ditto; Keating's cough lozenges; Holloway's pills, &c., &c., "et hoc omne genus." And as a specimen of the obscene class, the following will serve:—

"Wray's Balsamic Pills, (established 34 years), a certain cure for urinary diseases, whites, gravel, affection of the kidneys, pains in the loins, lumbago, stone in the bladder, irritation of the bladder or urethra, disease of the prostrate glands, and a decided specific for gout and rheumatism.—Price 2s. 9d. and 4s. 6d. per box.—Sold by Thomas Hackett, 18, Lower Ormond-quay, Dublin."

And—

"Medical advice free.—Dr. Lea may be consulted gratuitously in the following disorders, which he has many years most successfully treated, viz.—consumption, dropsy, hooping cough, gout, rheumatism, sciatria, paralysis, female and nervous affections, diabetes, cancer, scrofula or king's evil, scurvy, and eruptions generally, likewise other complaints, including those of a confidential nature, (in both sexes), on receipt of stamped envelope for reply.—Address, G. Lea, M.D."

Not to enumerate many others—now, sir, here was a book, which even the most fastidious could not from its name and external appearance object to, published by a Dublin publisher at a very low figure, sold in numbers in the public thoroughfares of Dublin in open day and all the day, and who can sum-up the amount of suffering and discord it is calculated to introduce into families; for believe me the poet Juvenal has struck the right string when he says—

"Fallit enim vitium specie virtutis et umbra,
Quum sit triste habitu, vultuque et veste severum."

However, not to trespass further on your space, I think I have abundantly proved my position; and will therefore proceed to fulfil my first intention in writing this letter, viz., to endeavour with your co-operation to bring the subject prominently before the attention of the profession, and through them of the community, and especially members of the national legislative body. That Parliamentary intervention is necessary, I think is fully proved by the simple fact alone, that although the "Medical Council" has numbered years by its existence, yet it has done literary nothing, or worse than nothing, to remedy this evil, nor, practically at least, has it to the slightest extent enabled the general public to distinguish the really qualified from the mere impudent vile advertising pretender. But apart from Parliamentary interference, can we not do something ourselves, at least to ameliorate this evil, if not eradicate it? I think a united Profession such as ours ought to be able so to do, if backed and assisted by our Colleges and Corporate Medical Societies; and I would suggest that a meeting of the Profession should be convened to take the whole subject into consideration with a view to ultimate proceedings, legislative or otherwise, to have this vile class of impostors suppressed, and thus remove for ever an evil that has too long been an opprobrium to our noble Profession, and a disgrace to our country.

Hoping, sir, as you have ever been foremost in advocating the claim of anything calculated for the advantage of the profession, or the mitigation of the wrongs of suffering humanity, that you will not permit this subject to be overlooked, but will give it the benefit of your able co-operation until something definite has been affected, and apologizing for occupying so much of your space—faithfully yours,

JOHN S. A. CUNNINGHAM, M.D., &c., &c.

MEDICAL ACT'S AMENDMENT BILL.

TO THE EDITOR OF THE MEDICAL PRESS AND CIRCULAR.

SIR,—In your paper of February 20th, Dr. Williams asks, "What is to be done with students, medical assistants, and midwives, if the proposed bill proves efficacious for the thorough and legal protection of the medical profession?"

As to midwives, the sooner their practice is stopped the better. They attend principally upon the very poor, and by so doing they deprive the Union Medical Officer of the fee allowed by the Poor-law Board. If we add to the above cogent reason the fact of the general ignorance of the greater class of women practising midwifery, I think it is high time some steps should be taken to protect the lives of those who are foolish enough to employ them.

With regard to medical assistants, why should they not be compelled to register? By so doing medical men could ascertain the character of an applicant for an assistancy, by referring to a Medical Assistant's Directory, which might be published under the authority of those appointed as Registrars. All persons claiming to be registered as assistants to produce to the Registrar evidence as to their ability to act in that capacity, and certificates as to their general character. No one to be allowed to act as an assistant unless registered, and all registered persons to have the title of assistant-surgeons as long as they act in that capacity. A fine might be inflicted upon all unregistered persons using the above title, and upon those acting as assistants, unless duly registered. I do not think that assistants would object to the above, and by this means the difficulty with regard to them would be overcome, and they themselves become not only an important but a recognized branch of the medical profession. Students are already compelled to register.—I am, sir, respectfully yours,

T. T. B.

TO THE EDITOR OF THE MEDICAL PRESS AND CIRCULAR.

SIR,—In the last issue of THE MEDICAL PRESS AND CIRCULAR, I see a letter from Dr. Williams, regarding the Medical Act, and the proposed Amendments. In his views I fully coincide, and I have no doubt the entire profession will do the same. It is well known that quackery is as rampant as ever, by adapting itself to the requirements of the "Medical Act," and no longer assuming those titles and qualifications by which legitimate practitioners are known. In this town we have one of the voracious tribe, doing a large business. For the last few years he has ceased taking medical titles, and thus, while avoiding the penalties imposed by the "Act," he continues quacking away as formerly.

Let a clause be inserted in the proposed "Amendment Bill," forbidding any person to act as a medical man, except he be a qualified and registered practitioner. An exception can be made in the case of medical assistants, etc.

I think the Medical Council, as a representative body (?) should insist on the Legislature the great necessity of something similar to what I propose, for the purpose of guarding the just rights and interests of the profession. No doubt, union and concord among local practitioners would go far to suppress the traffic of any particular quack; but as doctors differ, not only professionally, but socially and politically, this happy state may not be attainable at all times and in all places, consequently, a legal enactment is imperatively required,—Yours, very truly,

CHARLES GARLAND, L.K.Q.C.P.I., L.R.C.S.I.

TREATMENT OF ENTERITIS.

TO THE EDITOR OF THE MEDICAL PRESS AND CIRCULAR.

SIR,—On looking over my case-book for 1828, I found the following which may, perhaps, prove interesting to some of your readers.

In August, 1828, we were at Carthagena, on the Spanish Main, and we had hardly anchored when a boat came alongside with a request that the doctor should go on shore, and visit professionally a respectable French emigrant merchant, who was reported to be in a dying state from the disease called "typhus fever." I went on shore and found a rather corpulent elderly gentleman in bed, in a fine large airy room. On examination I found all the symptoms of the disease called "typhus fever," but I found also that he had "acute enteritis;" he could not bear the slightest abdominal pressure. His French physician had given up all hopes of him, his treatment had been quinine and ammonia; the family were very anxious that I should do something. Foreigners have an idea that English

naval surgeons are very skilful, at all events their advice is always solicited in case of necessity.

I did not admire this case very much; however, I ordered thirty grains of calomel, and five of opium, instantly, the calomel to be repeated every hour, in conserve of roses. I ordered also one ounce of the camphoratia mercurial ointment to be rubbed well into the thighs and arms every hour. I stimulated gently the thighs and arms by a smooth iron heated in boiling water, so as to create rapid absorption. In twelve hours the symptoms were alleviated: in twenty-two hours complete ptyalism had taken place, when I pronounced the patient out of danger, so far as the disease was concerned. In the meantime I had ordered an enema consisting of two ounces of castor-oil beat up with the yolk of two eggs in a pint of warm gruel, which procured two very copious and highly fætid evacuations with great relief. Having given the necessary directions for future treatment we left next day, and of course I heard no more of it.

Four years afterwards I visited Carthagena, and we had not been about two hours at anchor when I received a friendly visit from my friend the merchant, who told me that he had had a rapid recovery, and that next to God, for he was a good Catholic, he was indebted to me for his life, and that my instructions had been most scrupulously observed. As I refused any pecuniary consideration, he sent me on board, just as we had weighed anchor, a box containing presents to the value of about 300 dollars.—I am, sir, your obedient servant,

ALEXANDER LANE, M.D., Surgeon Royal Navy.

P.S.—About five years after this I received a letter from the French Physician which had followed me from station to station, thanking me for the valuable information he had received, that he had adopted my treatment, and had been most successful. My ideas about this disease had not been quite matured at this period.

THE IDIOT QUESTION.

TO THE EDITOR OF THE MEDICAL PRESS AND CIRCULAR.

SIR,—The idiot question is a very important one. In idiots the organs of relation are undeveloped as well as imperfect, and the mind remains dormant. There is, nevertheless, a great diversity in idiots, for some are very much more susceptible of culture than others. *In limine*, it is undesirable that numbers labouring under a common deficiency should be herded together. It would be better that each single idiot, every lunatic, all deaf and dumb persons, should be surrounded by those, only, who were of sound mind and perfect faculties. This, however, in the first instance, at least, would be inconvenient, and therefore it is asylums become inevitable. Nevertheless, as soon as possible, the developed idiot should be placed in ordinary schools, where his deficiencies should be supplemented by the intelligence of others. It may be objected that the idiot needs special training. In fact, he needs both special and general training, and the teachers in ordinary schools could very readily make themselves conversant with the special forms of culture needed by idiots and deaf and dumb persons. For it is, in truth, a very great loss to those who are maimed in faculty and intelligence to be shut out from others who, in these respects, are more happily circumstanced; and, their deficiencies notwithstanding, there are many things in which idiots and imbecile persons might, to a certain extent, share in the common culture of those around.

The maintenance of idiots, as of other unhappily defective individuals, should fall upon the community at large. It is not right or fair that a few charitable persons should be exclusively mulcted, every one should bear their proportion. In this way the burthen would fall heavily on none. The practice of raising a fund, and then laying it out in brick and mortar is a bad one. The building is raised, and there is nothing left to maintain it, save the onerous and precarious expedient of sending round the hat. I submit that in all such cases the sum, whatever it might amount to, should be put to interest, and that the interest alone, supplemented by any funds in aid that were obtainable, should be applied to the construction of proposed asylums and to their after maintenance. So impressed with the importance of this, not long since, was a merchant in Boston, U.S., that when he left 80,000 dollars for a benevolent object, he stipulated that not a single dollar of the money should be expended in brick and mortar. The consequence was that people clubbed together and built the asylum, which, subsequently, owing to the merchant's provident forecast, had an ample revenue for its maintenance.

Supposing the asylum for idiots once established, however, a great enemy awaits it, and that is the spirit of mere routine. Routine, it is true, we must have, but unmixed routine is greatly to be deprecated. It shuts out improvement, and contracts our usefulness. I once visited an asylum of note for idiot children. The general appointments and management were worthy of every commendation, but the special culture of the inmates appeared to me to languish, in fact, seemed in many respects quite unworthy of the munificent provision. Idiot children, indeed, when they attain a certain forwardness, would be better circumstanced if mixed up with, and sharing the culture bestowed on other children. They would thus, as far as their low estate would permit, share the general culture of the multitude, and reap the advantages flowing from that great implement of human advancement, education to wit, which I firmly believe, is destined one day to regenerate the world.

HENRY MACCORMAC, M.D.

Parliamentary Intelligence.

HOUSE OF COMMONS.

FEB. 25TH.

PETITIONS were presented, by M. AKROYD, for granting the franchise to graduates in medicine, arts, and divinity; by Mr. GREGORY, from Mr. Joseph Hopton, Leeds, in favour of the educational franchise; by Mr. TALBOT, from the Board of Guardians of Bridgend and Cowbridge Union, in favour of the rating of mines, woods, plantations, and real property; by Mr. BUTLER, from the District Board of Works of the parish of Whitechapel, and from the Vestry of the Hamlet of Mile-end Old-town, praying the House to pass a measure for the equalisation of poor-rates throughout the metropolitan parishes on the basis of annual value; by Mr. LEFROY, from the President and Council of the Irish Medical Association, praying for superannuation allowances to medical officers of poor-houses and dispensaries.

ENSIGN CULLEN AND SURGEON MORRIS.

In reply to Mr. Gilpin, Mr. MOWBRAY stated that there had been two separate courts-martial held on Ensign Cullen and Surgeon Morris, one of the charges being applicable to Surgeon Morris only. As regarded Surgeon Morris the trial commenced on Dec. 11th, and had not concluded when the last mail left. It was not usual to lay the proceedings of courts-martial upon the table, and until the whole of the proceedings had been completed he could give no answer.

CRIMINAL LUNATIC'S BILL.

Mr. WALPOLE, in moving the second reading of this Bill, said its object was very important. There was at present no power to discharge from confinement the class of persons to whom it applied, when reported to be quite recovered, unless they were set completely free. But this measure proposed that, instead of simply discharging them out of prison without any conditions, the Crown should be enabled to impose conditions, so that they might or might not be subject to supervision as might be necessary.

The bill was read a second time.

FEB. 26TH.

FACTORY CHILDREN.

Mr. FAWCETT moved a resolution affirming the expediency of extending the educational clauses of the Factory Act to children who are employed in agriculture, which was seconded by Mr. AKROYD, who spoke of the good effect of the Act in manufacturing districts.

Mr. TREVELYAN supported the motion, and dwelt on the importance of a combined effort for the advancement of general education. He thought the country gentlemen had not sufficiently stirred themselves in the matter.

Mr. GOLDNEY and Mr. READ denied that the country gentlemen were indisposed to promote education in the agricultural districts, but said the difficulty was to get the children to school and keep them there.

Mr. WALPOLE, while pointing out that the subject would be riper for discussion when the Report on the Employment of Children in Agricultural Districts in Gangs was before the House—as it would be very shortly,—intimated

that he had already arrived at the opinion that it might be necessary to extend some provisions of the Factory Act to children employed in agriculture. It might be necessary to enlarge the powers of the Commissioners to enable them to inquire into the educational condition of children not employed in gangs; and as he was about to bring in two Bills for the extension of the Factory Acts on Friday, he, therefore, begged Mr. Fawcett not to press his motion.

After some observations from Mr. H. Bruce, Sir F. Crossley, Mr. Alderman Lusk, Mr. Whalley, and Colonel Stuart, Mr. Fawcett withdrew his motion.

FEB. 27TH.

Petitions were presented by Sir F. CROSSLEY, from the Halifax Poor-law Guardians, in favour of abolishing the power of removal of poor persons from one locality to another; and another praying that all mines and woodlands may be made liable to pay poor rates; by Mr. W. E. FORSTER, from the Bradford Board of Guardians, in favour of rating mines, timber plantations, and other property to the relief of the poor; and by Alderman SALOMONS, from the Local Board of Health for the district of Woolwich, for equalising the rates for the relief of the poor over the whole metropolis.

DUBLIN UNIVERSITY PROFESSORSHIPS BILL.

Mr. LAWSON, in moving the second reading of this bill, explained that its object is to remove another of the religious disabilities which Roman Catholics have just reason to complain of, by throwing open to persons of all religious denominations the three professorships of anatomy and surgery, chemistry, and botany in Dublin University. As far back as 1853 a commission, of which the late Archbishop Whately was a member, recommended the removal of these restrictions, so that the present measure came before the House with some authority. The Solicitor-General for Ireland, speaking in another place, seemed to take exception to the course pursued in introducing the bill; but he ventured to think the learned gentleman would hardly endorse the same argument in his place in that House.

Mr. LEFROY said he was in a position to give not only his own assent but also the assent of the Board of Trinity College to the bill. The reason why a measure was not introduced on the part of the university authorities themselves was owing to some diversity of opinion between the University Board and the Medical Board with regard to other amendments.

The bill was then read a second time.

The Solicitor-General for Ireland and Mr. C. Fortescue supported the second reading of the bill.

MEDICAL OBITUARY NOTICE.

DR. HORACE GREEN.

THIS distinguished American Physician has passed away at the ripe age of 64. His name has long been "familiar as a household word" on both sides of the Atlantic. He visited this country in 1838, and soon afterwards distinguished himself as one of the most original investigators of diseases of the air passages. He first described "follicular disease" of the throat, and first proposed to treat laryngeal diseases by topical applications, by means of a sponge probang passed down to and beyond the vocal cords. His views encountered great opposition. It was positively denied that the probang could be thus passed, and for many years poor Horace Green maintained the controversy almost unaided. Nor was opposition always fair. Indeed, few men have encountered so much undeserved obloquy. The New York Academy, after an enquiry, about which the less said the better, issued a "report" on the subject, bearing marks of personal hostility to Green. Many of our own authorities adopted the view that Green had been mistaken, and a good deal of controversy ensued. This is scarcely worth reviving. We rejoice that the brave old man survived to see the laryngoscope come into daily use, and demonstrate to the eyes of the most sceptical some of the positions he had laid down. It is, perhaps, rare for such true workers and genial men, when once they have raised opposition, to live to see their own views so signally proved; and, no doubt, the recent brilliant progress of laryngoscopy compensated the subject of this notice, at least we may hope to some extent it did, for some of the most unhappy hours of his younger days. He died at Sing Sing, on the River Hudson, on the 29th of November last.

SCHOLARSHIPS AT MERTON COLLEGE, OXFORD.

ON Saturday, May 4, there will be held an Election at this College to—

1. One Classical Postmastership, value £100 per annum, tenable for five years.
2. One Mathematical Postmastership, value £80 per annum, tenable for five years.
3. One Classical Postmastership, value £80 per annum, tenable for five years.
4. One Natural Science Scholarship, value £60 per annum, tenable for five years.

[Candidates for the above must be under 20 years of age.]

[Candidates for the Natural Science Scholarship will be examined in the ordinary Classical Matriculation subjects—viz., a portion of a Greek and Latin author, Latin writing, grammar, arithmetic, and algebra; and to those who pass this examination, papers will be offered in physics, chemistry, and physiology.]

Also,

5. One Classical Postmastership, value £80 per annum, for five years. Open to candidates of any age.
6. One Exhibition, value £25, for three years. Also with no limit to age.

Candidates are requested to send to the Warden, on or before Monday, April 29, certificates of age and testimonials of conduct.

The Examination will begin on April 30, at 9.30 A.M.

KING AND QUEEN'S COLLEGE OF PHYSICIANS IN IRELAND.

Quarterly Examination for Licenses in Medicine, February, 1867.

(Second Day.)

PRACTICE OF MEDICINE.—DR. MOORE.

1. Symptoms and physical signs of effusion in the left pleural cavity?
2. Symptoms and physical signs of aneurism of the transverse portion of the aortic arch?
3. Pathology and symptoms of tubercular meningitis?
4. Enumerate the exciting causes of hæmoptysis?
5. Describe the condition of the urine in albumenuria, and the complications which may ensue during the course of the disease?

MIDWIFERY.—DR. JENNINGS.

1. State Hunter's view of the placental circulation; also any one of the other theories that have been advanced on this subject.
2. Under what circumstances may the "tampon" be used during pregnancy? In what cases would its use be improper?
3. Enumerate the symptoms of rupture of the uterus. State the various modes of delivery in such cases, and the circumstances that may render each eligible or necessary.
4. Describe a well-marked case of "Chlorosis;" give also the pathology and treatment of this disease.
5. Describe purulent ophthalmia in newly born children, its causes, treatment, and possible results.

MATERIA MEDICA AND MEDICAL JURISPRUDENCE.
DR. BELCHER.

1. What is the composition of antimonium Tartaratum; and what is the mode of its preparation?
2. In what cases would you prefer the use of antimonial, alkaline, and saline diaphoretics; and of stimulant diaphoretics, respectively?
3. Prescribe a draught containing tincture of hyosciamus, for want of sleep in a case of Typhus occurring in an adult? (The prescription to be written in words at full length, without symbols or abbreviations.)
4. Describe the symptoms of poisoning by strychnia; and explain the mode of administering tobacco as an antidote in such cases.
5. How would you proceed to detect feigned epilepsy in a case of supposed malingering?

MEDICAL GLEANINGS.

(From the British and Foreign Medico-Chirurgical Review.)

ON OVARIOTOMY.

M. Kœberle, who has done so much towards the introduction of ovariotomy into France, observes that the prejudices against it in that couutry are gradually diminishing, and comments upon the difficulties there are in statistically comparing this with the other great operations. These have so many analogies as to render them comparable, while ovariotomy is not only a more or less serious operation according to the general conditions under which it is undertaken, but also with respect to the particular cases and the different operative procedures. The surgeon who only operates in desperate and complex cases will necessarily obtain less successful general results than if he operated only in simple and favourable cases. The cases which are met with on the continent are generally unfavourable ones, the prejudices against the operation causing great delay in resorting to it. And yet, practised in opportune time, and before the development of grave complications, due to the prolonged existence of the tumour to the tappings, &c., it has been subjected to, and to the adhesions which have formed, ovariotomy is relatively an operation of slight gravity, as is shown by the statistics which have been published of late years.

M. Kœberlé points out that the fatality of ovariotomy so frequently observed on the continent cannot be explained by the vitiated air of large towns, the nationality of the patients and the like, as other cases operated on in the same localities and occurring in persons of the same country, have succeeded well. At Strasburg, prior to his own successful operations, all cases proved fatal. His first fourteen operations, between 1862 and 1865, were performed at St. Barbe, an establishment which is far from presenting favourable sanitary conditions ; and yet he met with ten recoveries to four deaths. Among these fourteen cases there were seven cases of single ovariotomy, one of which, occurring in a patient in very bad health, proved fatal. Of the seven cases of double ovariotomy three proved fatal, in two of these death being due to the operation itself. The number of cases of double ovariotomy which have occurred in M. Kœberlé's practice is very remarkable—viz., ten examples (four dying and six recovering) out of twenty-seven cases. Mr. Wells only met with seven double ovariotomies in 150 cases, and declined operating in seven other cases ; and Dr. Keith has only had three double ovariotomies in thirty-five operations. To the present time M. Kœberlé has never, even in the most difficult cases, &c., in spite of most extensive adhesions, had to leave an operation unfinished. In his first fourteen operations there were two series of four successful cases separated by five cases giving rise to three deaths, and the practice of the English surgeons present very remarkable instances of series of successful and unsuccessful cases. The only case in which M. Kœberlé cut short the ligature of the pedicle, proved fatal, although the patient presented conditions very favourable to recovery. She died with symptoms of septicæmia forty-four hours after the operation, the only abnormal appearance found at the autopsy being a circumscribed sero-purulent collection around the ligature.—*Gazette des Hopitaux.*

ON SOME CAUSES OF THE INCREASED SPREAD OF SYPHILIS.

Professor Sigmund in this paper states some of the causes explanatory of what he says is a well-established fact, that syphilis is much on the increase. But it seems to us that the causes which he adduces have always existed, and in no wise explain any increase which may have recently been observed. First among these is the ignorance of the patient as to the nature and duration of his complaint, and the insufficiency of the time he remains under medical inspection—so that he is often unaware that he is ill, or believes himself cured long before he is so. The spot where the contagion operates may in the first instance exhibit very slight and fugacious changes of structure which by some simple application, and without medical aid, may disappear, to be succeeded within some weeks by more decided textural changes, such as induration, papulæ, &c., affecting the same part. In women, the diseased conditions are even much less readily detected than in men. During the period of incubation also, which is seldom shorter than two or three weeks, and in not a few cases extends to six, it is impossible for the patient to be aware of an affection which he may have ample opportunity of spreading. How common, sexual intercourse is even after disease has made considerable progress, the experience of every hospital surgeon testifies. Next comes the generally spread opinion that the patient is cured as soon as skinning over of a sore has taken place. The specialist is in no such haste to pronounce on the matter until he has watched the patient during the period in which constitutional symptoms may arise. Many patients are thrown into a state of false security by the immediate employment of prophylactic measures, which experienced observers know to be useless or mischievous—the course of syphilis not being preventible by any such means. It will be long, however, before surgeons and their patients accept this opinion. Erroneous diagnosis causes the most different non-syphilitic appearances to be mistaken for the true disease until the characteristic symptoms of the latter appear. Lastly comes the difficult question of latent syphilis, during which persons apparently well continue long to have the power of affecting others. The general conclusion is that more careful examination and prognosis are requisite, and that the public should be indoctrinated in the necessity of these. Professor Sigmund protests against the inactivity of the medical profession in the face of the ever-increasing spread of the venereal disease ; and maintains that even individual action may do much by propagating correct ideas upon the subject.—*Wien Med. Wockenschrift.*

HOSPITAL GANGRENE.

Dr. Fischer has published an elaborate and valuable report on the cases of hospital gangrene observed in the External Division of the Berlin Charité during 1864-65. They amounted to 44 in number ; 33 occurring in men and 11 in women. Many of the cases are given in full details, and the following are some of the conclusions which the reporter arrives at from their observation :—

1. Hospital gangrene may occur at any time of the year and in all states of the weather.

2. Although it may attack the strong and the weak, the young and the old, yet aged and cachectic individuals are its especial victims.

3. The hospital genesis of hospital gangrene is not tenable.

4. Hospital gangrene develops a specific contagion. (*a*) This contagion is transmissible by contact to wounds and animals. (*b*) It is not improbable that communicated to the air, it may infect wounds through this. (*c*) It is very questionable whether this contagion gives rise to a specific general infection before or after the development of the local malady. (*d*) Ulcers may be produced by hospital gangrene alike in all the tissues. (*e*) Ulcers and wounds of every description may be attacked by it. (*f*) For its development an ulcerated or exposed surface is not essential, as it may appear spontaneously in healthy skin. (*g*) A first appearance of hospital gangrene does not weaken its disposition to occur, and frequent relapses are not rare. In relation to treatment, Dr. Fischer speaks highly of the advantage derived from treating these patients in the tents placed in the grounds of the Charité. He insists strongly on the importance in the general treatment of pure air and perfect quiet, to absence of depressing emotions, and the necessity of good nourishment.—*Annalen des Charite Krankenhauses.*

IMPROVED FORM OF PROBES FOR THE LACHRYMAL PASSAGES.

Dr. Williams observes that "it has been customary to bend Bowman's probes to such a curve, as adapt them to the presumed direction of the nasal duct in each individual : but I have seen false passages formed where undue violence had been employed in their use ; and, at best, the mucous lining of the sac or canal was often torn or abraded by the unyielding extremity of the probe causing considerable hæmorrhage, and giving rise to irritation which retarded the cure.

"I have found great advantage in using probes made with bulbous extremities of the six sizes of Bowman's scale, but very slender for some distance from their ends ; so that the whole of that part of the instrument, without being unduly flexible, has an elastic pliability, enabling it to adapt itself to any sinuosities of the passage, and to find a route through the obstructions without laceration or contusion of the parts."—*Boston Med. and Surg. Journal.*

Medical News.

ARMY MEDICAL DEPARTMENT.—List of Gentlemen who competed successfully, for appointments as Assistant-Surgeons in Her Majesty's British and Indian Services, at the Competitive Examination held at Chelsea in February, 1867 :

Maximum of Marks obtainable, 3400 Minimum required to pass, 1034.

Candidates for Her Majesty's British Service.			Candidates for Her Majesty's Indian Service.		
Order of Merit.	Names.	Number of Marks.	Order of Merit.	Names.	Number of Marks.
1.	Bredon, R. E.,	2320	1.	Macrae, M.,	2515
2.	Fairland, E. J.,	2205	2.	Summerhays, H.,	2055
3.	O'Reilly, T.,	2195	3.	Aldren, R.,	2035
4.	Bloxam, J. A.,	2120	4.	Maconachi, G. A.,	2000
5.	Murphy, R. P.,	1955	5.	Leggatt, A. J.,	1995
6.	Townsend, E.,	1885	6.	Batty R. H.,	1975
7.	Cogan, T. S.,	1770	7.	McGann, T. J.,	1860
8.	O'Reilly, James,	1730	8.	Ritchie, J. H.,	1800
9.	O'Flynn, D. J.,	1700	9.	Bainbridge, G.,	1765
10.	Gray, Jos.,	1695	10.	Knapp, W. P.,	1760
11.	Parkinson, R. C.,	1690	11.	Lowry, J. R. C.,	1675
12.	Williams, J.,	1625	12.	McAllister, J.,	1635
13.	Olden, D. L.,	1580	13.	De Tatham, H.,	1630
14.	Supple, J. F.,	1575	14.	Arnott, J.,	1595
15.	Wade, N.,	1540	15.	Kerr, D. A.,	1510
16.	Irving, G. C.,	1520	16.	Smith, J.,	1490
17.	Moore, J. H.,	1505	17.	Shillitto, J.,	1430
18.	Wheeler, W. J.,	1495	18.	Haylett, H. J.,	1420
19.	Croker, J. R.,	1450	19.	Power, R. N.,	1410
20.	Roche, A. W.,	1340	20.	Long, D. B.,	1325
21.	Tolmie, T. C.,	1310	21.	Thompson, D. R.,	1300
22.	McAlevy, R. S.,	1270	22.	Keelan, B.,	1255
23	Morgan, J. W., / Purcell, G. C.,	1240 / 1240	23.	Hackett, A. S.,	1200
			24.	Haliday, S. B.,	1165
25.	Holmes, T. J. P.,	1220	25.	McClory, A.,	1095
26.	Kilroy, M. A.,	1180			

INDIAN MEDICAL SERVICE.—The Military Secretary, India Office, presents his compliments to the Editor of THE MEDICAL PRESS AND CIRCULAR, and begs to enclose a list of the Candidates for Her Majesty's Indian Medical Service, who were successful at the competitive examination at Chelsea in August, 1866, and who have undergone a course of instruction at the Army Medical School, together with the total number of marks obtained at the examinations at Chelsea and at Netley :—

Name.	Studied at	Total Number of Marks.
E. F. Brockman ...	London	5420
W. D. Stewart ...	Edinburgh ...	5028
O. C. Duff	,, ...	4420
W. G. May	,, ...	4172
H. D. Compigne ...	,, ...	4113
F. Metcalfe	London	4080
J. F. Sargent ...	,, ...	3962
P. F. Mullen ...	Ireland	3922
J. B. Gaffney ...	,, ...	3718
R. H. Curran ...	,, ...	3695
H. Hyde	,, ...	3505
C. J. M'Kenna ...	Edinburgh	3488
J. W. Strong ...	,, ...	3293
W. Nolan	Dublin	3236
J. J. Wood	Edinburgh	3158
W. Finden	,, ...	3048
A. McM. Paterson ...	,, ...	3000
A. R. Cowell ...	Ireland	2798
M. Heffernan ...	Edinburgh	2670
J. Simpson	Aberdeen	2543
S. O.B. Banks ...	Ireland	2395

LONDON AND GENERAL WATER PURIFYING COMPANY (LIMITED).—The third ordinary meeting of this company took place lately at the offices in the Strand, Viscount Ingestre in the chair. The report of the directors, which was read by Mr. Ruding, the secretary, stated that the board had much pleasure in finding that the hopes they expressed in the last report of the expected increased returns had been more than borne out, the returns of the past year being three times those of the preceding one, and their only regret was that the heavy expenses incidental to an undertaking of this kind had absorbed the otherwise handsome profit. They trusted, however, by the experience gained, to be able to effect a curtailment of expenses without in any way diminishing the operations of the company. During the past year the company's cistern filter had been adopted at the Regent's-park and Tower Barracks, and had been selected by the London, Middlesex, and St. George's Hospitals, thereby demonstrating not only its superiority over all others, but the great importance, in a sanitary point of view, that was attached to the filtration of water by the highest medical authorities. Strong hopes were entertained that before long the authorities in India would have satisfied themselves from the adoption of the cistern filter. The medical profession still continued proportionately the largest supporters of the company, and it was to them that the results hitherto attained were mainly to be attributed. The directors had again declined availing themselves of the power under the articles of association to accept fees, not wishing to divert the funds of the company for any purpose, but to devote them solely to the development of business to its utmost extent. The report was received and adopted.

CONVICTION UNDER THE MEDICAL ACT.—On Monday, at Dewsbury, W. Knowles, of Hanging Heaton, was brought up on a charge of wilfully and falsely pretending to be a surgeon, and taking the name and using the title of surgeon, implying that he was registered under the Medical Act. Mr. William Wiseman, surgeon, was the complainant, and it appeared the defendant was formerly an assistant in his service. He had selected three out of at least fifty cases which had come to his knowledge in which the defendant had signed certificates of the deaths of patients, and styled himself a surgeon. The evidence being conclusive, the defendant, by the advice of his attorney, withdrew his plea of not guilty, and admitted the three offences proved against him. Fines amounting to ten guineas were imposed, with the alternative of three months' imprisonment.—*Yorkshire Post.*

SUNDAY LIQUOR TRAFFIC.—The Earl of Derby received a deputation on Wednesday evening, February 27th, at his official residence in Downing-street, which had been appointed by a large meeting of working men in the Lambeth Baths, on Friday last, to plead with him against the sale of intoxicating liquors on Sunday. The deputation was introduced by the Rev. John Garrett, D.D., and was accompanied by Archbishop Manning, Rev. Newman Hall, Mr. Bazley, M.P., and Dr. Ellis, and consisted of representatives of every branch of trade. His lordship after listening attentively to the various speakers expressed much satisfaction at having received such a deputation, saying it was a question first for the House of Commons ; that the Government could not undertake the anxiety of introducing such a measure, and advising rather that it should be introduced by an independent member of Parliament. The deputation then withdrew, expressing their thanks to his lordship for so kind and satisfactory a reception of their request.

THE POOR-LAW MEDICAL OFFICERS.—On Wednesday last a large number of the metropolitan Poor-Law medical officers met at the Freemasons' Tavern to consider the provisions of the Metropolitan Poor Bill. Dr. Rogers, of the Strand Union, presided, and there were present many gentlemen interested in Poor-Law questions as visitors. Letters of apology were read from Mr. Thomas Hughes, M.P.; Mr. Devonport Bromley, M.P.; and others. And the honorary secretary, Dr. Dudfield, read a very able report upon the bill, which was generally approved, and it said, "No part of this statesmanlike scheme has excited more lively pleasure than the clauses which propose to put the treatment of the outdoor sick poor upon a proper footing. Efficient medical attendance, together with adequate relief, would keep many a family out of the workhouse, and so largely tend to diminish pauperism. For it is too true that the first plunge is all that is dreaded in this case as in many others; and the honest poor man who shrinks from the thought of entering the workhouse for the first time, after he has taken that fatal step is too prone ever after to regard the house as an easy resource in time of difficulty, and as a comfortable home—so pernicious is the loss of a proper sense of independence." The chairman moved the adoption of the report, and in doing so detailed the struggles the Poor-Law medical officers had, for a period extending over eleven years, maintained against the guardians in the endeavour to obtain rights for themselves and the proper necessaries for the sick under their charge. He then referred to the establishment of the Association for assisting the Sick Poor in the London Workhouses, and dwelt upon the vast good which that association by the assistance of the press had been able to accomplish in a very short time. He also referred to the labours of Dr. Anstie, Dr. Carr, and Mr. Ernest Hart, in visiting and reporting upon the London workhouse infirmaries, and said the value of those reports was to be seen in the great exposures which had followed as to the management of those workhouses. He expressed himself as greatly pleased with Mr. Hardy's Bill, but urged that there were points which would have to be considered in committee. Dr.

Welsh seconded the adoption of the report, which was carried unanimously. Dr. Dudfield then moved the following resolution:—"That this meeting is of opinion that Mr. Hardy's Metropolitan Poor Bill will effect considerable improvement in the medical care and treatment of the sick poor; and they recognize with great satisfaction that it embodies nearly all the recommendations suggested by this association." Mr. Eugene Goddard seconded the motion, which, with an addendum proposed by Dr. Fowler, seconded by Dr. Carr, that all the charges of the indoor sick poor should be defrayed out of the common fund, was carried unanimously. Resolutions were also carried that the Bill should be watched, and endeavours made to obtain life appointments for medical officers and for other purposes, and the proceedings closed in the usual manner.

MR. BAXTER LANGLEY, of Lincoln's-in-fields, has been appointed receiver under the High Court of Chancery in accordance with a decree in the case of Brighouse *v.* Margetson.

Notices to Correspondents.

The Titles and Contents for Vol. II. are issued with this Number.

Communications to the London Editor should be addressed to 20 King William-street, Strand; to the Edinburgh Editor, at Maclachlan and Stewart's, South Bridge; and to the Dublin Editor, at 3, Lincoln-place.

All Contributions are attentively considered, and unaccepted MSS. are returned on receipt of stamps for postage; but the Editors cannot be responsible for any accidental loss, nor can MSS. or replies be delivered on personal application.

Contributions should be *legibly* written, and only on one side of the paper.

When proofs are forwarded it is of the utmost importance that they should be corrected and returned without delay.

MEDICAL VACANCIES.

Andover Union—Medical Officers for No. 4 and No. 5 Districts.
Cheshire Lunatic Asylum—Assistant Medical Officer.
Chorlton Union—Assistant Medical Officer for the Workhouse, Withington.
Islington Dispensary—Resident Medical Officer.
Lambeth Workhouse—Resident Medical Officer.
St. Giles and St. George, Bloomsbury—Assistant Medical Officer.

MEDICAL APPOINTMENTS.

T. BAKER, M.R.C.S.E., has been appointed Medical Officer for the Roberts-bridge District of the Ticehurst Union, Sussex.

G. CARPENTER, M.R.C.S.E., has been appointed Medical Officer to the Workhouse of the Castlecomer Union, Co. Kilkenny, vice C. E. Ross, M.B., deceased.

T. DANDY, M.R.C.S.E., has been elected Medical Officer and Public Vaccinator for the Rufford District of the Ormskirk Union, Lancashire, vice C. Dandy, M.R.C.S.E., deceased.

R. GOODING, M.B., has been appointed a Surgeon for the Greenwich District of the Royal Kent Dispensary.

G. F. HARDEN, M.B., has been elected House-Surgeon of the Bolton Infirmary and Dispensary.

W. HARDIN, L.K.Q.C.P.I., L.M., M.R.C.S.E., has been appointed Medical Officer to the Portsmouth District of the Portsea Island Union.

JAMES NEAL, M.D., has been appointed Honorary Surgeon to the Birmingham and Midland Counties Lying-in Hospital and Dispensary for Diseases of Women and Children, vice J. Archer, F.R.C.S.E., resigned.

H. R. PALMER, M.R.C.S.E., has been appointed a Surgeon for the Greenwich District of the Royal Kent Dispensary.

J. R. PERKINS, L.R.C.P.Ed., L.S.A., has been appointed Resident Medical Officer to the Sick Children's Hospital, vice W. O. P. Nolston, M.D., whose appointment has expired.

H. M. TUCKWELL, M.D., has been appointed Consulting Physician to the Warneford Asylum, Oxford, vice G. W. Child, M.D., resigned.

G. WATSON, M.D., has been appointed House-Surgeon to the Dumfries and Galloway Royal Infirmary, vice John Smith, M.B., C.M., resigned.

S. WOODCOCK, L.R.C.P.Ed., has been appointed Medical Officer for the No. 1 District of the Chorlton Union, vice John Smith, M.R.C.S.E., resigned.

MEDICAL DIARY OF THE WEEK.

THURSDAY, MARCH 7.

ROYAL LONDON OPHTHALMIC HOSPITAL, MOORFIELDS—Operations, 10½ A.M.
CENTRAL LONDON OPHTHALMIC HOSPITAL—Operations, 1 P.M.
ST. GEORGE'S HOSPITAL—Operations, 1 P.M.
UNIVERSITY COLLEGE HOSPITAL—Operations, 2 P.M.
LONDON SURGICAL HOME—Operations, 2 P.M.
WEST LONDON HOSPITAL—Operations, 2 P.M.
ROYAL ORTHOPÆDIC HOSPITAL—Operations, 2 P.M.
ROYAL INSTITUTION—3 P.M. Prof. Frankland, "On Coal Gas."
HARVEIAN SOCIETY OF LONDON—8 P.M. Dr. Tilbury Fox, "On Parasitic Diseases of the Skin, and on a Case of Fibroid Molluscum associated with Kelis."

FRIDAY, MARCH 8.

ROYAL LONDON OPHTHALMIC HOSPITAL, MOORFIELDS—Operations, 10½ A.M.
WESTMINSTER OPHTHALMIC HOSPITAL—Operations, 1½ P.M.
ROYAL COLLEGE OF SURGEONS OF ENGLAND—4 P.M. Prof. Huxley, "On the Osteology and Dentition of the Sauropsida, or Reptiles and Birds."
ROYAL COLLEGE OF PHYSICIANS—5 P.M. Croonian Lectures: Dr. Andrew Clark, "On the States of Lung commonly comprehended by the term Pulmonary Phthisis."
ROYAL INSTITUTION—8 P.M. Rev. W. Greenwell, "On the Yorkshire Wold Tumuli."

SATURDAY, MARCH 9.

ST. THOMAS'S HOSPITAL—Operations, 9½ A.M.
ROYAL LONDON OPHTHALMIC HOSPITAL, MOORFIELDS—Operations, 10½ A.M.
ST. BARTHOLOMEW'S HOSPITAL—Operations, 1½ P.M.
KING'S COLLEGE HOSPITAL—Operations, 1½ P.M.
ROYAL FREE HOSPITAL—Operations, 1½ P.M.
CHARING-CROSS HOSPITAL—Operations, 2 P.M.
ROYAL INSTITUTION—3 P.M. Prof. Frankland, "On Coal Gas."

Births, Marriages, and Deaths.

Announcements are inserted without charge, and must in all cases be authenticated with the signature of the sender.

BIRTHS.

PATERSON.—On the 18th of Jan., at Kurnaul, East Indies, the wife of Dr. H. F. Paterson, Royal Artillery, of a daughter.
SPEEDY.—On the 25th of Jan., at Poonah, Bombay, the wife of Dr. Speedy, Surgeon 45th Regiment, of a daughter.
GOODING.—On the 11th ult., at Sussex-place, Cheltenham, the wife of J. C. Gooding, M.D., of a daughter.
WIGLESWORTH.—On the 15th ult., at Brougham-terrace, Liverpool, the wife of Arthur Wiglesworth, Surgeon, prematurely, of a son.
HUGHES.—On the 20th ult., at Formby, the wife of W. F. Hughes, M.R.C.S.E., of a daughter.
WILKINSON.—On the 23rd ult., at Aston-road, Birmingham, the wife of A. G. Wilkinson, M.R.C.S.E., of a son.
LORD.—On the 25th ult., at Victoria-place, Crewe, the wife of Richard Lord, M.D., of a daughter.

MARRIAGES.

ADLEY—BURNEY.—On January 19th, at Barrackpore, Calcutta, W. H. Adley, Surgeon, 17th Bengal Cavalry, to Evelina Ross, younger daughter of Major-General G. Burney, Bengal Army.
ARMSTRONG—PRATER.—On February 19th, at the parish church, Woolwich, J. C. Armstrong, M.R.C.S.E., of Gravesend, to Annie, second daughter of A. Prater, M.D., of Barrington-villas, Shooter's hill.
HEAD—CLEAVE.—On February 20th, at St. Breock, R. L. B. Head, Surgeon, R.N., to Lizzie, daughter of T. Cleave, Esq., Trevanion, Cornwall.
JONES—EIDSFORTH.—On February 19th, at the parish church, Wyresdale, Dr. Jones, of New Malton, Yorkshire, to Mary, fourth daughter of the late Eidsforth, Esq., Poulton Hall, Lancaster.
OAKES—KELLETT.—On February 20th, at Ballyconnell, County Cavan, F. A. Oakes, Staff Surgeon, to Anna Selina, eldest daughter of the Rev. O. S. Kellett, Esq., Rector of Tomregan, Cavan.
THURSFIED—WILLIAMS.—On February 14th, at Llandudno, T. G. Thursfield, M.D., Broseley, Salop, Anne Catharine, eldest daughter of John Williams, Esq., Bodofon.
WOTHERSPOON—PRIMROSE.—On February 27th, at 24, Royal-crescent, by the Rev. Dr. M'Ewen, assisted by the Rev. John Moodie, William Wotherspoon, L.F.P. & S. Glasgow, to Jessie M'Farlane, only daughter of Peter Primrose, Esq.
KELSO—RANKING.—On Jan. 10th, at St. John's Church, Trichinopoly, by the Rev. Octavius Dene, B.A., John Andrew Kelso, Esq., Lieutenant Royal Artillery, to Marion, daughter of William Harcourt Ranking, M.D.Cantab., F.R.C.P.L., and niece of J. L. Ranking, Surgeon-Major and Acting Garrison Surgeon, Trichonpoly, Madras.

DEATHS.

MEGGY.—On the 6th Jan., at Uitenhage, Port Elizabeth, South Africa, F. Meggy, M.R.C.S.E., formerly of Park-crescent, Stockwell, aged 26.
OWEN.—On the 15th ult., at Fitzroy-square, J. L. Owen, M.D., late of Brooklyn, New York, and of Carnarvon, aged 50.
MONDAY.—On the 16th ult., in London, J. R. Monday, M.R.C.S.E., of Olveston, near Bristol.
LOWE.—On the 18th ult., at Worcester, Edgar Lowe, M.R.C.S.E., Surgeon in the Gloucestershire Militia, aged 36.
EVANS.—On the 18th ult., at Narberth, Jessie James, the wife of Maurice Griffith Evans, M.D., and youngest surviving daughter of the late Evan George, Esq., of Plas Crwn, in the County of Pembroke.
MORRIS.—On the 21st ult., Wm. Morris, M.R.C.S.E., of Tudor-road, Upper Norwood, formerly of Camberwell, New-road, aged 66.
FERGUSSON.—On the 2nd inst., at Ailsa-cottage, Girvan, Ayrshire, of bronchitis, William, infant son of Alexander Fergusson, L.R.C.P. Ed., &c.

INSURANCE.

INDIA AND THE COLONIES.

THE STANDARD LIFE ASSURANCE COMPANY, with which the COLONIAL LIFE ASSURANCE COMPANY is now amalgamated, affords the greatest facilities for effecting Assurances on the Lives of Persons proceeding Abroad.

Local Boards and Agencies in each Colony, where Premiums are received and Claims settled.

Moderate Premiums, at Rates suited to each Climate.

Immediate reduction to Home Rates on return to Europe or other temperate climate.

Loans advanced to Civilians and Military Officers.

Profits divided every Five Years.

Annual Income of the Company upwards of £650,000 sterling. Invested Capital and Accumulations upwards of £3,500,000.

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The Right Hon. Lord DUFFERIN AND CLANEBOYE.

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WILL. THOS. THOMSON, *Manager.*
WILLIAM BENTHAM, *Resident Secretary.*

DUBLIN—66, UPPER SACKVILLE-STREET.

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UNIVERSITY LIFE ASSURANCE SOCIETY.

EXTENSION TO FOUNDATION SCHOOLS.

Additions in 1865 at the rate of 1¾ per cent. per annum.

CHARLES McCABE, Secretary.

24, Suffolk-street, London, S.W.

APOTHECARIES' HALL, LONDON.

NOTICE IS HEREBY GIVEN that, at a Meeting of the Court of Examiners of the Society of Apothecaries, on the 14*th instant*, the following resolution was agreed to:—

"That the Court of Examiners refuse to receive any Certificates of Lectures, or of Anatomical Instructions, delivered in private to particular Students, apart from the ordinary Classes of public, recognised, Medical Schools."

W. P. BRODRIBB, Secretary to the Court of Examiners.

February 25th, 1867.

LONDON NURSES' INSTITUTE.

42, South Audley-street, Grosvenor-square, W.

TRAINED NURSES (Medical, Surgical, Mental and Monthly) can at all times be obtained from this Institute.

Hospital Appointments by special arrangement.

Letters and Telegrams should convey the nature of the case to be attended.

T. HAMILTON, Manager.

LISNASKEA UNION.

Brookeborough Dispensary District.

IN consequence of the resignation of Dr. McGOWAN, the Committee of Management of the above Dispensary will, at their Meeting to be held in their Committee-room in Brookeborough, on *Tuesday, 19th March, instant*, at the hour of Two o'Clock, proceed to the Election of a Medical Officer for the above District, whose qualifications must be in accordance with the recent orders of the Poor-Law Commissioners.

Salary, as Medical Officer, £100 per annum.

All applicants must appear in person on the day of Election, and will be required to present their Diplomas and Testimonials to the Committee on that day.

By Order,
MATT. H. SANKEY, *Hon. Sec.*

LURGANBRAE, BROOKEBOROUGH,
2nd March, 1867.

The private practice and Registration Fees have been found to exceed the sum of £150 during the last year.

MEDICAL CHORAL SOCIETY.

FOUNDED A.D. 1866.

Patron:

LORD TALBOT DE MALAHIDE.

President:

T. E. BEATTY, Esq., M.D., F.R.C.S.I.

Vice-Presidents:

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Committee:

E. D. MAPOTHER, Esq., M.D., F.R.C.S.I.
W. J. HEPBURN, Esq., L.R.C.P. & S. Edin.
W. B. PEARSALL, Esq., L.R.C.S.I.
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C. BELL, Esq.
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J. ALEXANDER, Esq.

Hon. Secretary:

T. W. HIME, Esq., A.B., Steevens' Hospital.

Treasurer:

R. KELLETT, Esq., Steevens' Hospital.

Conductor:

W. HOUGHTON, Esq.

This Society has been formed for promoting the Study of Music among the Members and Students of the Medical Profession.

All Members and Students of the Medical Profession are eligible for election as Members of the Society.

Weekly Practise Meetings are held in the Schoolhouse adjoining St. Anne's Church, Molesworth-street, under the superintendence of the Conductor.

It is purposed to give at least two Concerts each Session.

The Annual Subscription of One Guinea entitles the Subscriber to Two Tickets for each Concert.

The Subscription for Performing Members is 5s. per Quarter. Performing Members require to be proposed, seconded, and balloted for.

N.B.—*Gentlemen desirous of becoming Members can learn all particulars by applying to the Secretary.*

SURGICAL SOCIETY OF IRELAND.

THE Meetings of the Society for the Session 1866-67 will take place at the Royal College of Surgeons, on the undermentioned Evenings, at Half-past Eight o'clock precisely:—

1867.—Friday, 15th March.
,, Friday, 29th March.
,, Friday, 26th April.

Members who intend to read Papers before the Society are requested to inform the Secretaries, in writing, of their intention a few days previously.

Discussion on any Paper is not permitted unless the writer calls for it or desires it.

When the Contributor of a Paper wishes that the Secretaries should read it to the Society, he will please forward it to them some days before the Meeting.

Except under special circumstances, no Member can be permitted to occupy the Meeting in reading a Paper for a longer period than half an hour; and the Society will not be held responsible for any opinions advocated in the communications read. Neither can a Member be allowed to speak for more than ten minutes, during a debate relative to a communication.

After a Paper has been read it becomes the property of the Society, for publication in its proceedings.

The exhibition of recent morbid specimens is allowed precedence of all other communications; but a specimen cannot be considered a recent one unless it has been removed from the body within the fortnight immediately antecedent to the Meeting.

Each Member of the Society, being a Subscriber of 5s. to the Refreshment Fund, is entitled to as many Tickets for Visitors as he may require, at 6d. each.

Naval and Military Surgeons are admitted as Honorary Members of the Society on sending their names to the Secretaries.

None but Physicians or Surgeons are admitted to the Meetings of the Society.

CHARLES BENSON, M.D., } *Honorary*
B. WILLS RICHARDSON, F.R.C.S.I., } *Secretaries.*

Oration.

THE ANNUAL ORATION FOR 1867,

DELIVERED AT THE

HUNTERIAN SOCIETY,

HELD AT THE LONDON INSTITUTION.

By WILLIAM SEDGWICK SAUNDERS, M.D.,

CONSULTING-PHYSICIAN TO THE SCINDE AND DELHI, EAST INDIAN, BOMBAY AND BARODA, GREAT SOUTHERN OF INDIA AND CALCUTTA, AND SOUTH-EASTERN RAILWAY COMPANIES; VICE-PRESIDENT HUNTERIAN SOCIETY; TREASURER TO NEW SYDENHAM SOCIETY; MEDICAL EXAMINER TO MUTUAL LIFE OFFICE, ETC., ETC.

(Continued from page 208.)

The process is said to have cost £300 of our money, and was, of course, only applicable to the rich. The fee for embalment alone, varied from a talent (which has been estimated by some as equivalent to £193 15s., and by others to £243 15s. of our present money) to a mina, in value about £3 4s. 7d.

The embalment of the middle classes was, in some degree, regulated by their means; the simplest form being, the destruction of the intestines with strong oil of tar, and after their removal soaking the body in a strong solution of nitre for a period not exceeding seventy days.

Some have ascribed the practice of embalming to the fact of the periodical inundations of the Nile, rendering interment impossible at such seasons, and hence have thought that necessity had quite as much to do with the custom as the religious principle; but this idea is not well founded. The Nile continues to overflow, but embalmings have ceased for ages.

After Hippocrates the name of Aristotle comes before us. Aristotle was the pupil and friend of the venerable Plato, whose doctrines he adopted and developed: he lectured at Athens 370 years before Christ. As a physician and naturalist he was far in advance of his contemporaries, and as a mathematician and moral philosopher, his transcendent learning was, for ages, the theme of every scholar; and his "System of the Universe" was adopted by the whole of the civilized world. These great qualities attracted the attention of Philip of Macedonia, who chose him as the tutor of his son Alexander (the Great). Ignorance and superstition were, however, omnipotent, and for having enunciated the doctrine of one God, and a supreme first cause, the priests of the various temples seeing their craft in danger, excited the populace, who threatened his life. Warned by the fate of Socrates, he retired to Chalcis to wear away a life embittered by personal suffering, and sorrow for the folly and ingratitude of his countrymen.

The heart's deepest feelings are roused at the remembrance of the deeds of violence perpetrated against every benefactor of mankind who has had the courage to promulgate truths beyond the comprehension of the vulgar on the one hand, and opposed to the vested interest of established errors on the other. The fate of Aristotle is a common result, not confined to the dark ages, not without examples amongst ourselves.

The learned Philo of Alexandria, who lived A.D. 40, has given us an interesting account of the very remarkable sect living in Egypt in his day, known as the "Theraputiæ," or "healers." He describes them as a confraternity who, after having received a special training in the University of Alexandria, devoted themselves to the healing art; they led a secluded, contemplative life, and laid the foundation of the monastic system. Eusebius calls them Christians, but this is not confirmed by Philo, who was a member of the sect; they were, probably, Platonists, or philosphical pagans. They ascribed their cures to prayers, fastings, and incantations, eschewed all material remedies and medicaments; but made free use of magical rites of both forms—the leucomancy, or white magic, used in invoking the gods, and necromancy when the demons were to be propitiated or coerced. St. Luke, before his conversion, is supposed to have been a Therapeut; and St. Paul denounces some of their errors. Of their faults we cannot judge, but we may admire the benevolence with which they devoted themselves alike to the physical and moral welfare of their fellow men—in this respect, no unworthy forerunners of Him who commanded his disciples, not only to "instruct the ignorant," but to "heal the sick."

We pass over three centuries to come to the time of Celsus, who, in the regin of Tiberius, and the first century of our Lord, was established at Rome; where he acquired great honour and renown. To these he was fairly entitled by the extent of his learning and the especial attention he paid to surgery and medicine. His principles governed the medical world without a rival until the time of Galen, who divided the empire with him for centuries.

Celsus was the first native Roman physician whose name has been transmitted to us. The practice of medicine and surgery being prior to his time in the hands of eminent Greeks and Asiatics, excepting that there existed in Rome (at that period) a race of native practitioners, who belonged to the class of slaves or persons of low degree; and to whom were entrusted only the subordinate branches of the healing art.

The great proficiency of Celsus on the subjects of rhetoric, philosophy, military tactics, and rural economy, as mentioned by Quintillian, has induced many of our older writers to doubt whether he ever really practised medicine and surgery, or, whether, like the the elder Cato, he simply studied them as a branch of general knowledge; and this scepticism has been favoured by the fact of his name being omitted by Pliny, in his "Treatise on the History of Medicine." On the other hand, no one, I think, can rise from the perusal of his celebrated work, "De Medicina," without being thoroughly convinced that his intimate acquaintance with the theory and practice of medicine, surgery, and pharmacy could only have resulted from close bedside observation.

Galen was born at Pergamos, in Asia, in the second century; his learning was great, and his literary labours enormous. Having traversed Egypt and Greece, and acquired a knowledge of every science taught in the schools there, he settled in Rome. His works have been estimated at over 300 volumes—medical, physical, and meta-physical.

Galen bled more frequently than his predecessors, but he gave very careful directions as to the conditions under which venesection should be resorted to, as well as to the quantity of blood to be taken.

Averroes, Avicenna, and other Arabian physicians held him in great veneration; and Dr. Alison says:—"For centuries after his death his doctrines and tenets were regarded in the light of oracles, which few persons had the courage to oppose; and the authority of Galen alone, was estimated at a much higher rate than that of all the medical writers combined, who flourished during a period of more than twelve centuries.

Rome, in its decadence, was too much occupied with the intrigues and villainies of the factions by which it was ultimately destoyed, to spare any time for the culture of science. It was not until after the total disappearance of the Eastern Empire, and the hollow tranquility which succeeded the triumphs of Mahomet, and the subsequent subjugation of Spain by the Moors, that learning reared its head in Alexandria, and the Arabian physicians came into view.

Although Greece had disappeared, even in the noonday of its glory, its literature never possessed more devoted admirers, nor more faithful exponents than are to be found among the Arabian philosophers, and yet what a striking contrast is exhibited in the characters of the two people. Whilst making the philosophy of Greece their own, they by no means lost their distinctiveness and individuality. The Greeks delighted in all that was brilliant and fascinating, like the beautiful scenery of Attica and Asia Minor. The Arabs were thoughtful and grave, monotonous and arid, like the deserts they inhabited. The genius of poetry illumined all the meditations of the former, and their thoughts were graceful, even in their errors, whilst the reflections of the latter were dull and melancholy, albeit they were based on truths.

A dreary night now ensues—we have no name of note until Paulus Œgineta in 640: but what a series of historically grand events interpose: The invasion of Europe by the Huns—Division of the Roman Empire—Taking of Rome by Alaric—Visigoths established in Spain—Saxon heptarchy begun—Conquest of Italy by Totila—Birth of Mahomet, down to the taking of Alexandria by the Arabs—Greece and Rome having virtually disappeared; and our next author (Paulus) probably present at the burning of the great library.

Paulus Œgineta is entitled to our homage, as the author of an abridgement of the works of Galen, and many excellent treatises on medical subjects, especially on those incident to childbed and the diseases of women; he lived in the seventh century, and his labours have been thought worthy of being translated by the Sydenham Society. Paulus Œginta was the first writer upon *small-pox* and *measles*, and the originator of the theory of *zymosis*, which has received so much attention of late. He died about the middle of the seventh century, and with him expired the last of the Greek writers upon medicine.

Avicenna, who lived in the year 980, deserves a fuller notice than we can afford him; his works are said to present great clearness and acuteness. At the early age of eighteen he was chosen Physician to the Court of the Caliph of Bagdad, where for some offence he was imprisoned, and ultimately died. He has been called the "Hippocrates of the Arabs."

Rhazes was contemporary with Avicenna, and has attracted the respectful attention of the lovers of ancient medicine. His most esteemed work is a treatise on small-pox, which was translated by Dr. Mead in 1548.

I will conclude these sketches of the Arabian schoolmen with a brief notice of Averroes, the most eminent of them:—

This profound scholar was born at Cordova, in Spain, of which city his father was the alcade, about the year 1120. He was educated in Morocco, then in its glory, and in the celebrated schools there studied law, philosophy, and medicine. His admiration for Aristotle was unbounded, and his unwearied application to the examination of that great man's works, secured for him the reputation of the ablest commentator on the Aristotelian philosophy. He rose to the dignity of a judge in Morocco, but the freedom of his opinions being in advance of the age, he was imprisoned for some years, and only released on recanting his errors; he died 1206 during the Caliphate of Almanzer.

The glories of the Moorish power now began to wane, and after repeated discomfitures in 1516, that intelligent and highly civilized people were finally expelled by Ferdinand the catholic: the cross triumphs—the crescent retires, and takes with it all that is admirable in arts, or humanizing in science; the Spaniard has chased away Mahomet, and receives the Inquisition as the first-fruits of his conquest.

The war against opinion was carried on so vigorously that Copernicus, whose acute perception had discovered the errors of Aristotle's theory of heavenly bodies, was fiercely denounced. Copernicus was born in Westphalia in 1473, he studied at Cracow, where he received the degree of Doctor of Medicine; at Bologna his piercing genius discovered that the sun was the centre of the planetary system, that the earth was a planet and revolved round the sun like other planets, and thus was first made known the true system of the universe. Being distasteful to the church, the Pope issued a sentence of excommunication; and he died with a heart oppressed by such unmerited persecution.

These discoveries were further pursued by another learned physician, Galileo, who was born at Pisa in 1564. He entered the University there in 1581, and prosecuted his studies with such zeal and success, that in a very few years he became Professor of Mathematics. He now began his career as a teacher of the philosophy of Copernicus, and soon received unpleasant evidences that the disciple of truth must be ready to suffer. A congregation of cardinals, monks, and mathematicians of the old school, determined that his works were heretical and dangerous, and the holy inquisition sentenced him to prison. After remaining incarcerated some months he was taken before his judges, and required to renounce his errors, and with his hand upon the Gospel, to swear that they were sinful and detestable. Having performed this horrid penance, his conscience upbraided him, and as he rose from his knees, he exclaimed, "yet it does move," for which relapse he was further sentenced to perpetual imprisonment. He continued thus excluded for many years, during which time blindness, deafness, and pains in his limbs embittered his existence, and death at length, more merciful than the Holy See, released him from his trials. Newton was born in the year this noble martyr died.

For the edification of the worshippers of the "good old times," a few more instances of the loving kindness which prevailed may be acceptable.

The clerical sages of the University Salamanca pronounced that the assertion of Christopher Columbus, that a continent existed beyond the seas, was blasphemous and feloniously wicked. A Bishop of Salisbury expressing his belief in the existence of the antipodes was denounced by the Bishop of Mentz as a dangerous heretic, and committed to the flames.

Bigotry, however, is not confined to any one creed, since we know that Calvin the reformer, a man who had suffered persecution "without learning mercy," no sooner finds himself invested with the power to punish the freedom of thought which he had himself indulged in, than he persecutes to death the learned physician Michael Servetus, not for any immoral proclivity, but because he believed him to be unsound on the doctrine of the Trinity. Servetus took his degree of Doctor of Medicine at the University of Paris about the year 1535. He is the author of some medical treatises on the circulation of the blood, and also translated Ptolemy's geography; he was for some time in constant correspondence with Calvin, but as the "Odium theologicum" is the bitterest, Calvin shewed his christian charity by causing his antagonist to be consigned to the flames.

But I must hasten forward, Fallopius looms in the distance, and with him the men come fast and numerous. Gabriel Fallopius was born at Modena about the year 1523, and was one of the great triad of anatomists in Italy, who laid the foundation of the modern science of anatomy at the latter end of the 16th century. Fallopius succeeded Vesalius in the chair of anatomy and surgery at Padua in 1557. His career was brilliant but short, and he died in 1562. It should be mentioned that Fallopius shared the usual fate of great discoverers; his originality was disputed, and his learning questioned; but it has been always so, and in appreciating the works of our predecessors, we must keep in view the enormous difficulties by which every onward step, whether in art or science, is beset.

"Envy doth merit, as it shade pursue." Truth does indeed ultimately prevail, but too frequently the heart of the discoverer is broken before the obtuseness of the mediocrities in power, by whom it is obstructed, can be overcome.

Although a little diverging from the strict chronological order, I must here introduce to you our old acquaintance Paracelsus; this eccentric genius had too little virtue to be admired, and too much talent to be despised. He was born at Zurich, in Switzerland, in 1493, and was consequently contemporary with many more learned, but less celebrated men; an unblushing and presumptuous egotist, he presents himself in a moral point of view, the exact antithesis of the amiable and virtuous Hippocrates. That he made some very useful discoveries must be granted to him; he introduced the use of opium into Germany, and was the first practitioner who employed preparations of mercury, antimony, sulphur, iron, and other remedies.

Van Helmont is the most indulgent of his biographers, and Lord Bacon the most severe; but perhaps the description given by Zimmerman comes nearest the truth—"Paracelsus burnt publicly at Bâle the works of Galen, Avicenna, and other eminent predecessors, because, he said, 'they

knew nothing of the cabballa and magic,' which lay at the root of all medical and natural laws. He undertook to cure all diseases by the use of certain words and charms. He enjoined secresy on his disciples, and certainly was the first *great quack* from whom the numerous band of Charlatans have proceeded."

He has left his mantle behind him, and his descendants, with none of his brains, have largely inherited his presumption. On the occasion of his inauguration in the Chair of Medicine he thus expresses himself:—

"Know," says he "that my *cap* has more learning than all your professors, and my beard more experience than all your academies! I speak to you Greeks, Latins, Frenchmen, Italians, &c., &c. *You* will follow *me*, *I* shall not follow *you*. You, I say, doctors of Paris, Montpellier, Dalmatia, of Athens, you Jews, Arabs,. Spaniards, English, I tell you all that nature obeys me; and if God does not deign to assist, I have yet the devil to resort to. I am king of all science, and command all the hosts of hell."

We have in this impostor the very embodiment of the true quacks of to-day; their language is indeed a little subdued, but their pretensions are as large; and, let me add, that whereas Paracelsus, in his days, had the countenance and support of many persons of rank, so in ours, there does not exist an ignorant pretender without the patronage of the great, and this patronage, too often, in the exact ratio of his presumption and falsehood.

It must not be overlooked that this arch impostor died miserably, in poverty, induced by dissipation, and the possessor of the elixir of immortality breathed out his drunken soul at the age of fifty.

We have a lively picture of the state of things begotten by this man in the pages of Burton, an example in himself of the power of credulity, and a proof that great scholastic learning was by no means at variance with the wild vagaries of the times.

Let me offer you one specimen on the subject of demoniacal possession, first introducing you to a new character, Cornelius Gemma, who was born at Louvain in 1535, and was one of the greatest scholars of his age, a professor of medicine in his native town (the chair having been conferred upon him by the great Duke of Alva, who governed the Low Countries), and whose writings embrace the subjects of medicine, mathematics, magic, and spiritual possession. Like Cardan, he was thought a little extreme in some views, but this one example suffices to demonstrate the evil influences of Paracelsus. Gemma, in his second book on natural miracles, says:—"A young maid called Katherine Gualter, a cooper's daughter, in the year 1571, had such strange passions that three men could not hold her. She purged a live eel—I myself saw and touched—a foot and a half long; she vomited twenty-four pounds of fulsome stuff of all colours twice a-day for fourteen days, and after that great *balls of hair*, *pieces of wood*, *pigeons' dung*, *coals*, and after them *two pounds* of pure blood, and then again coals and stones *(of which some had inscriptions)* bigger than a walnut. All this I saw with horror. Physic could do no good, so she was handed over to the clergy."

Marcellus Donatus relates a story of a country fellow who had four knives in his belly, every one a span long, and indented like a saw; also a wreath of hair, and much other baggage. How they came "into his guts" he knew not.

Burton lived about 1576, and was consequently of the same age as our great Harvey, of whom we have now to speak. Before we proceed, however, it will not be out of place to notice the general belief in astrology, and especially lunar influences which prevailed at this period. Herbs and roots had their several patrons, and it was only when gathered and preserved under certain prescribed circumstances that their specific virtues were assured.

This superstition is not yet extinct; even in this year of grace, 1867, we are not quite emancipated from the ignorance of the primeval ages, and it is not a very unusual thing to see an advertisement in the *Times* announcing a "child's caul" for sale. These and such-like absurdities, "though it make the unskilful laugh, cannot but make the judicious grieve."

Nor is this credulity confined to the illiterate classes. The dupes of St. John Long, as many of us may remember, included "potent, grave, and reverend seniors," and on his memorable trial, a certain noble lord gave evidence that Mr. Long had extracted a piece of lead from his head. Some scoffers think it a pity that the quack, having succeeded to some extent, left so much behind.

In speaking of Harvey, it is difficult to strike out any new path in a tale that has been told so often. Yet, we may extract something out of the consideration of the times in which he lived, and the men by whom he was surrounded. He was born at Folkestone, in 1578, and commenced his travels at 19 years of age. What his previous education had been does not appear, but we find him at the age of 24 elected Doctor of Medicine at Padua—then the most famous University in the world. On his return to England he received the honour of Doctor of Medicine at Cambridge. James the First, and his son, Charles the First, favoured him with their countenance, and in 1628 he was induced to publish an account of his great discovery. As a matter of course he was at once denounced as a visionary; personal abuse was unsparingly poured upon him; but, as the grand fact enunciated was not to be shaken, his enemies turned round and discovered that, after all, it was not new, and had been the doctrine of many eminent physicians from the earliest days. The old, old story: the same sickening detraction—the same miserable envy rife in every age and clime. Harvey died in 1658.

The College of Physicians in London owes its foundation to Dr. Thomas Linacre, of All Souls, Oxford, a man of profound learning, who had won honours at Rome, Bologna, and Florence.

Linacre, through his interest with Wolsey, a wise and liberal patron of learning, obtained, in 1518, letters patent from Henry the Eighth, constituting a corporate body of regular Physicians in London. He was elected the first president, and meetings were held at his house in Knight Ryder-street until his death. With a munificence not without many worthy imitators in our profession, as we shall presently point out, he bequeathed this house to the College.

Harvey was elected president of the College of Physicians in 1654, but excused himself on account of his age and infirmities. Such, however, was his attachment to that body (best evinced by *donationes inter vivos*), that, in 1656, he made over his personal estate in perpetuity for its use, having previously (on the occasion of the College being removed from Knight Ryder-street to Amen-corner) built them a library and public hall (now the site of Stationers' Hall), which he granted for ever, together with his private library and valuable collection of instruments. He died in 1658.

I may here mention that, after the fire of London, the College of Physicians was rebuilt on a site in Warwick-lane, formerly called Eldenesse-lane, until the erection of the palatial residence of Guy of Warwick, the King-maker.

Sir Christopher Wren was the architect of the new College, and its burnished dome gave Pope the opportunity of displaying his powers of satire thus—

> "Witness a dome, majestic to the sight,
> And sumptuous arches bear its oval height;
> A golden globe, placed high, with artful skill,
> Seems to the distant sight—a gilded pill."

Shortly after the death of Sydenham came Dr. Freind, who was born in 1675. Being a man of worth and learning, he soon acquired a leading position in his profession, and, having devoted himself early in life to the study of politics, he was returned to Parliament as member for Launceston, where, having warmly espoused the cause of the amiable Atterbury, he fell under the censure of Walpole, who sent him to the Tower on a charge of treason. This misfortune gave rise to one of the finest instances of friendship and devotion, on the part of his friend Mead, that has ever been recorded for the honour of human nature. Walpole was taken seriously ill, and of course sent for Mead, who at

that time was the most popular physician. The doctor is reported to have addressed the minister thus:—"You are very ill, Sir Robert, and I can cure you; but one condition is indispensable. Dr. Freind has been in prison some months, and my esteem for him is so great that I will not prescribe a single thing for you until he is set at liberty." Walpole hesitated, but Mead was resolute, and at length the tyrant gave way. Freind was released, and Mead, when he paid his first visit of congratulation, took with him a considerable sum of money, the produce of fees he had received from Freind's patients during his incarceration.

Next in order, we must say a few words of Dr. Mead. Richard Mead was born in 1673, at Stepney. Political troubles drove his father, who was rector of the parish, into Holland, where this future ornament of the medical profession was educated, at Utrecht, under Grœvius. He continued his studies at Leyden, and, travelling into Italy, took his degree of doctor at Padua. On his arrival in England, where his fame had preceded him, the University of Oxford confirmed his title, and the College of Physicians received him with applause, as did the Royal Society (then but recently established).

He soon became the leading practitioner of the day, and in course of time Physician to George the Second. For more than half a century he attended at St. Thomas's Hospital, and is said to have suggested to Guy the foundation of the hospital known by that name. A more noble, disinterested, and generous man than Mead never lived. His emoluments were very large, and his benevolence and hospitality kept pace with his income. It is stated that no poor applicant ever left his door unrelieved.

"Large was his bounty, and his soul sincere,
Heaven did a recompense as largely send."

He lived without envy, leaving his many literary labours as monuments of his talent and industry, and after a life of 80 years, died full of honours.

The reign of Queen Anne has been called the Augustan age of literature in England, and was in no less degree looked upon as the great day of medical science. In the former we have to name Swift, Addison, Warburton, Pope, Steele, Parnell, Rowe, Gay, and others; and amongst Physicians—Freind, Mead, Radcliffe, Cheselden, Arbuthnot, Garth, &c., &c.

Radcliffe next comes under notice; he was a man cast in a rougher mould than Mead. John Radcliffe was born at Wakefield, in Yorkshire, in 1650, and educated at Oxford, where he became a Fellow of Lincoln College; after a two years residence he resigned his Fellowship and devoted himself to physic, removed to London, and settled in Bow-street, Covent Garden. He was a man of ready wit, and great conversational powers, with much pleasantry and frankness. In 1686 he was appointed physician to Princess Anne of Denmark, and after the revolution was often consulted by William the Third; the latter on his return from Holland sent for Radcliffe, and shewing him his ankles swollen, and his body emaciated, the doctor brusquely said, "Truly I would not have your Majesty's two legs for your three kingdoms." This sally lost him the king's favour, nevertheless he still prospered, and sat in Parliament for the borough of Buckingham.

In the last illness of Queen Anne, Radcliffe was sent for, but excused his attendance on account of indisposition; the Queen died the next day, and Radcliffe was greatly censured, which is said to have hastened his own death, which took place three months after.

There is a story told of his quarrel with Sir Godfrey Kneller, the celebrated painter. They were next door neighbours, and enjoyed a certain garden in common. Kneller complained that Radcliffe took no care that the door leading into this garden was kept properly shut, and sent a snappish message to the doctor, that if he were not more mindful he would shut up the door and keep the key. Radcliffe's answer was, "Tell Sir Godfrey Kneller he may do what he likes with the door provided he does not paint it." Kneller retorted to this sarcasm, "Tell the doctor I will take anything from him except his physic."

I cannot find that Radcliffe ever published any work; but at his death he left the munificent sum of £40,000 to the University of Oxford for the formation of a public library of medical and philosophical science, and a further considerable sum to provide for an annual augmentation of books and instruments. Garth, in allusion to this bequest, remarked that for Radcliffe to found a library was as if an Eunuch should establish a Seraglio.

Samuel Garth was among the celebrities of this time: The correspondent of Bolingbroke, the friend of Swift and Addison, and the patron of Pope, he must have possessed great merit to have reached such a position; he was born of a good family in Yorkshire, the date of his birth I have been unable to discover, but he was admitted a Fellow of the College of Physicians in 1693.

Garth was an active and zealous Whig, and consequently familiarly known to all the great men of that party; his orthodoxy was questioned, but it was the fashion of the times to be a free thinker. Pope apostrophises him in his second pastoral—

"Accept O! Garth the muses early lays,
That adds the wreath of ivy to thy bays."

And again, in conjunction with Arbuthnot, in "the Farewell to London,"

"Farewell Arbuthnot's raillery
On every learned sot,
And Garth the best good christian he
Although he knows it not."

Pope's favourite physician was Dr. John Arbuthnot, and never was grateful affection better bestowed. He was the son of an Episcopal clergyman in Scotland, born in 1675, and went through a course of academical studies at Aberdeen, where he also took the degree of Doctor of Physic.

On his arrival in London he supported himself as a teacher of mathematics, of which he was a great proficient, and became known to the world of letters by his examination of "Dr. Woodward's Account of the Deluge," by an able treatise on the "Advantages of Mathematical Learning," and the first book of the memoirs of "Martinius Scriblerus" has also been attributed to him. An accident introduced him to Prince George of Denmark, and led the way to his appointment of Physician to Queen Anne, and he retained the favour of the Court until the death of the Queen, when, being more than suspected of holding Jacobite proclivities, he was compelled to leave his quarters in St. James's Palace, and he retired to a small house in Dover-street.

Pope dedicated to him the prologue to his satires, and thus gracefully mentions him:—

"Friend to my life (which did not you prolong),
The world had wanted many an idle song."

The concluding stanzas are so full of tenderness that I venture to give them:—

"Oh! friend, may each domestic bliss be thine,
Be no unpleasing melancholy mine,
Me, let the tender office long engage
To rock the cradle of reposing age,
With lenient arts extend a mother's breath,
Make languor smile and smooth the bed of death.
On, cares like these, if length of days attend,
May Heaven, to bless those days, preserve my friend,
Preserve him social, cheerful, and serene,
And just as rich as when he served a Queen."

For some time before his death he suffered from asthma and dropsy, and bore his affliction with characteristic fortitude and resignation. He died in 1734, leaving a son, who was one of Pope's executors, and two daughters.

Next to the illustrious Scotchman whom we have just dismissed comes a very worthy native of the Emerald Isle—Hans Sloane, the son of Alexander Sloane, the head of a colony of Scotchmen, who, in the reign of James I., settled in the north of Ireland. Hans was born at Killileagh, in the year 1660. He very early showed a liking for Natural History, and on his arrival in London attended lectures on Anatomy, Botany, and their kindred sciences, and formed a close intimacy with Boyle and Ray. After four years study he visited Paris and Montpellier, in which places he took his Degrees in Medicine. In 1684 he returned to London and commenced practice, being

now a Fellow of the Royal Society and of the College of Physicians. On the appointment of the Duke of Albermarle to the government of Jamaica he accompanied that nobleman, and thus acquired a rich addition to his Museum of Natural History.

A curious illustration of the observant mind of Sir H. Sloane is furnished by the fact of his having noticed that the natives of the West Indian Islands, who eat much of the green fat of the turtle, perspired a yellow oil; the explanation being that the true green fat of the turtle is a green-coloured cellular tissue enclosing a yellow oil, which passes through the system undigested. The anatomical data on which this statement is advanced have been, at a comparatively recent period, verified by actual experiments performed by the late Dr. Pareira, assisted by our much esteemed former President, Dr. Daldy. It occurred to my mind that this fact in dietetics might present a lesson of caution to an audience peculiarly exposed, as citizens of London, to the temptation of eating a material, which, however appetising, is incapable of healthy assimilation.

We have now reached the period at which legitimate medicine was established in this country; and as my discourse has already exceeded the assigned limits, it remains only to record our solemn tribute of the affectionate remembrance we all entertain towards those members of our society whose faces we shall so sadly miss in our next sessional meetings. Constituted as our cherished society is, as a friendly gathering of kindred spirits, actuated by mutual necessities, meeting as brothers, knowing no rivalry but the desire to impart, each to other, the results of our matured experience, it is with more than ordinary grief that we bow submissively to all-wise dispensation when Providence sees fit to lessen our numbers by death.

But it is not we alone who have sustained a loss. The name of Barlow will live for ages to come as the type of the scientific physician of the nineteenth century. A man of cultivated intellect, of elegant mind and blameless life, of calm judgment and exalted feeling, I look upon his death as nothing less than a calamity to the whole medical profession.

Too soon, alas! after him, we were shocked by the almost sudden removal of the accomplished and genial Jeaffreson, endeared to his brethren by those solid endowments which mark and govern the high minded practitioner and amiable gentleman—no less than to the public by those qualities inherent in a warm, kindly, and generous nature. And, what then shall we say of our dear friend, Henry Blankarne, so recently carried to his rest. Who can ever forget his pure and simple nature, his spotless life, and those endearing virtues which attached him so closely to those whose privilege it was to enjoy his friendship—one of Nature's gentlemen, considerate and delicate of the feelings of others, generous to the poor at the sacrifice of his valuable life, ready at all times and seasons to give his time for the promotion of any, and every benevolent scheme in connexion with our calling; we shall long mourn over the good old man. As I stood by and saw him committed to the ground but the other day, my mind reverted to the other honoured members I have mentioned, and I felt that one and all had realized and fulfilled to the letter the following monition of Bacon:—

"I hold every man a debtor to his profession, from the which as men of course do seek to receive countenance and profit, so ought they of duty to endeavour themselves, by way of amends, to be a help and ornament thereunto."

I now beg permission to draw the curtain. I have laid before you, with but little skill, some rapid sketches of our illustrious predecessors. I have shown how worthily they have fulfilled their mission; and, having approached the advent of that great man, to whose memory we dedicate this evening, I make my bow and retire, first thanking you for the attention you have accorded to my dull recital. I pause now, because I can add nothing to your knowledge of the character and labours of John Hunter. His patience under such difficulties as would have destroyed an ordinary worker, his sublime indifference to personal comfort and advantage when the interest of that science which he so well loved was in question—all these facts are "familiar to your minds as household words."

But, whilst we honour him by these periodical meetings, and by the discussion of sujects which formed the happiness of his life, it is only in the great museum, founded by his energy, that the grandeur of his character can be felt.

In that hallowed path, in which he delighted to tread, the mantle of his genius has fallen upon one who, with a kindred love, aided by the marvellous instinct of his own original mind, still follows out the investigations of the great author; adding each day something to the knowledge which went before, and still turning over some new page of the book of Nature, wherein the finger of God has written, in characters hitherto undeciphered, fresh evidences of His glorious infinity. Under the auspices of our honorary member, Professor Owen, we gaze and admire.

Lectures.

THE GULSTONIAN LECTURES.

By Dr. REGINALD SOUTHEY.

ABSTRACT OF LECTURE II.

Delivered March 1, 1867.

ROYAL COLLEGE OF PHYSICIANS OF LONDON.

THE NATURE AND AFFINITIES OF TUBERCLE.

How the different opinions entertained upon the nature of tubercle have become indoctrinated. Heteroplastic and hyperplastic growths. Two methods of Cytogenesis. Tubercle a heterologous growth, and hence closely allied to Cancer. Tubercle a lymphomatous tumour. The nature of lymphomatous tumours. Ductless glands the physiological type of these tumours; example of the simplest single form like a solitary follicle of the intestine; example of the compound form like an ordinary lymph gland. Two distinct sub-classes of tumours developed upon this pattern: the one being hyperplastic enlargements of normally pre-existing structures, the other being new growths or heteroplastic formations. The leukæmic lymphoma; the typhoid lymphoma; the scrofuloid lymphoma; lympho-sarcoma; their several inter-relationships and their kinship to tubercle. Scrofula. The scrofulous diathesis. The scrofulous lymphoma.

In commencing his second lecture, Dr. Southey proceeded to show in what way the different opinions of the Humoral school became *indoctrinated*. Sylvius de la Boc in 1695 stated that tubercle arose from certain glands in the lungs, which resembled those of the neck and mesentery, and hence the lymphatic doctrine of tubercle, as entertained by many eminent men. The same explanation is still offered by Humoralists of the present day. Dr. Rindfleisch in 1862, and Professor Virchow in 1865, and many others whom Dr. Southey quotes, and whose peculiar observations and opinions he presented to his auditors. He considered that this dyscratic blood theory usually ended by premising capillary obstruction by means of the aplastic fibriniform material thus introduced into the circulation, and by deriving tubercle directly from capillary embolism—by finding degeneration of the coats of arteries in people who had died of tuberculous diseases; thus, Henlé considered that the first wrong step was a defect in the capillary circulation—a coagulation of the blood in the vessels. Lebert and Peacock had noticed in several cases that aneurismal dilatation of the arteries accompanied tubercular developments. Bouchut observed the presence of granulations, not merely in the substance of the pia mater, but especially along the walls of the larger vessels of the brain in children who had died of tubercular meningitis. Dr. Rindfleisch found that the walls of the blood-vessels were not only studded up to

their finest twigs with grey tubercle, but that the developments in question were still visible as spindle-shaped varicosities upon the capillaries themselves. His investigations led him to attribute the first step of the tubercle growth to a hyperplastic increase in the finely granular substance of the middle coat of the vessels—accompanying this increase the nuclei multiplied became more spherical, and the structureless adventitia was bulged out before them—the protoplasm thickened into a cell wall around the nuclei, and thus the larger tubercle cells were found.

Not denying the possibility of this, Dr. Southey still observed that it must be remembered that evidence exists in favour of the more frequent origin of tubercle from the connective sheaths of the blood vessels, besides which their purely vegetative functions militate strongly against the probability of their substance ever being the point of departure of a new growth. He does not dispute the fact that tuberculosis is preceded by a distinct blood error—indeed, he would allow of capillary embolism as no uncommon accident in its course; but then, he says, the question at issue still remains just where it was, we shall not have advanced our knowledge of the pathological process one iota by these speculations, and must inevitably come back to the first and only actual evidence of definite error—the tubercle growth, which as yet has only been distinctly traced developing itself out of the connective or some correlative tissue.

He then explained the two terms which he used—heteroplastic and hyperplastic growths, as necessary to a thorough discussion and comprehension of the nature and affinities of tubercle, after which he remarked:—

"Cytogenesis in cell development appears to be conducted upon two principal plans, and I attribute the highest physiological importance to their distinct comprehension. The one is termed the homologous or divisional mode, the other the heterologous or endogenous.

"In cells which multiply by the homologous or divisional plan, the parent cell wall, endoplast and periplast together, enters into the composition of the walls of the several child cells. The separation of these from each other is of secondary moment; it is effected in two different ways: First, by fission, a dipping in of the parent wall about the divided nuclei, and by union or fusion of opposite sides; and, second, by gemmation or budding out of the cell wall, and pinching off of the out-growth.

"The point of importance is this, that although growth to almost any extent can take place in this way, no higher, no different development, is thus attained, the ultimate products are *fac similes* of their parents. Hyperplasia or increase in quantity of like forms only is thus attained. Examples will present themselves at once to the minds of all who hear me. Cartilage, bone, connective tissue, cells all increase thus; but in cells which multiply upon the heterologous or endogenous plan, the external wall, the periplast of the parent cell, forms no part of the external wall of the brood cells; here, too, the child or brood cells are probably separated from each other in two different ways: First, by the dipping in of the endoplast about the parent cell contents, and the segmentation of these thereby; and secondly, by the development of new endo and periplasts about the divided nuclei.

"Yet a few words more. Unicellular organisms, says Huxley, experience only external change of shape. All other plants and animals experience a morphological change of endoplast and periplast. The endoplast grows and divides, but undergoes neither chemical or structural metamorphosis. The periplast, however, experiences both chemical and structural change: the chemical changes, which are of two kinds, organic and inorganic, aim at the maintenance of nutrition and at solidification, while the structural changes, and fibrillation are rather directed to the cohesion of parts elementally distinct.

"The periplast of Huxley is the intercellular substance of Virchow, and just as growth or development takes place only by means of cells, so the metamorphosis or differentiation into tissue is effected chiefly by the product excretion or peculiar appurtenance of each particular cell, its periplast or external layer. This is that which is plastic or shapeable, the rest point the object aimed at, the form which confers those attributes on a tissue, through which we are enabled to speak positively as to its character, saying this has the features of elastic fibre, that of bone, another of cartilage or muscle or nerve.

"I do not for a moment pretend that the cells proper with their endoplasts undergo no structural change; they are metamorphosed in the direction of the tissue which they compose; they are the method of its nutrition, the means of its growth, and are capable of functional activity, as cells, for long after they have been considerably modified in shape by flattening and lengthening out in one or more directions. But it is the intercellular substance, the periplast, which, by its capacity for further development, wields them in its larger grasp and relatively higher bent; this it is which, at first always soft, gelatinous, and homogeneous, becomes granular, streaked or fibriform, cleaved or split. These are those parts which, originally separate, fuse together at their edges and confer unity, coherence, and permanency to formed tissues."

He then proceeded to notice the affinity or kinship, as he calls it, of tubercle with other morbid growths.

He had shown tubercle to be a heterologous growth proceeding by endogenous development out of connective tissue cells, but never reaching a connective tissue element again. They appropriate nutriment to themselves and grow, but they are short-lived, conceived in haste, and having no power of endurance. It is in this very matter, he said, that we perceive a close relationship between tubercle and cancer, and as Mr. Paget has shown in his pathological lectures, there are several other features in which they strongly resemble each other. These he specified at large, though he said cancer is allowed to be a graver heterologous error than tubercle, the latter having little or no power of maintaining itself, whereas the former is capable of low organisation, blood-vessels developing in it and extending freely throughout its substance.

Next, he reviewed that group of cognate growths which Virchow has classified together under the heading of lymphatic tumours, all which possess certain features in common. After accurately defining those features, he continued:—

"This, then, is the type which we must hold before our eyes. The tumours developed upon this plan fall into two clearly distinct sub-classes. The one comprehends the hyperplastic enlargements of structures which pre-existed in a normal state; the other includes the new or heteroplastic formations. In both cases the component elements proceed out of connective tissue, and in themselves are identical or highly similar; but the importance attaching to them is, of course, much greater when they occur in parts which ought properly to present nothing of their kind."

In the one sub-class we have the leukæmic lymphoma, the typhoid lymphoma, the scrofuloid lymphoma, lymphosarcomo, scrofulous glands; and, in the other sub-class, tubercle of mau, the perlsucht, or parresyge, or morbus gallicus, the pearl distemper of animals.

Most of those different abnormal formations contained in the first sub-class were separately described by the lecturer. He specified their individual characteristics, the points in which they resemble or differ from each other, their sites of predilection, their appearances, and a variety of other peculiarities, reserving scrofula as a much more important type of morbid affection for his next lecture.

ERRATA.—In Lecture I. of "The Gulstonian," published last week, for "orastina" read "*blastema*;" for "pusora" read "*presence*;" and for "embryoral" read "*embryonal*."

THE Ladies' Sanitary Association have issued an advertisment offering a premium of £100 for the best essay on "Vaccination," its actual value and attendant dangers. The essayists are requested to write without reserve; consequently, with so alluring a prize, and with such an injunction, the field will doubtless be full of competitors from all parts of the kingdom.

CLINICAL LECTURE
ON A CASE OF SCIATICA, ATTENDED WITH MOTOR PARALYSIS.

By C. HANDFIELD JONES, M.B. Cantab., F.R.S.
PHYSICIAN TO ST. MARY'S HOSPITAL.

GENTLEMEN,—Some of you may remember the patient whose case I am about to detail to you. We shall find in it I think interesting matter of consideration.

D. G., æt. 60, a hale strong looking elderly man, a horse-keeper, was admitted November 2nd, 1866. He stated that he generally had enjoyed good health, and his calm and steady manner convinced me immediately that there was no reason to be on our guard against any (so-called) hysterical exaggeration of his sufferings. Three weeks ago while at work he was taken with severe pain in the right hip, and down the leg to the ancle; he did not "rick" or strain himself at all; the attack was instantaneous, he turned faint, sick, and giddy, every nerve trembled. After half an hour he recovered a little, and was taken home to bed. When attacked he did not fall, nor lose consciousness, but was obliged to lie down. His urine at this time was not thick or red. Since his illness he has had difficulty in urining, he is ten minutes about passing a quantity which before he would have passed in one. At present the pain persists, and is continual, is rather worse at night. Heat makes the pain much worse, if he was to put the limb near the fire it would drive him into fits. The movements of the hip-joint are quite free. Has not the least power of moving the limb as he lies in bed, can barely stir the toes a very little. The limb is somewhat wasted. Bowels not at all costive. The foregoing notes were taken immediately after his admission; he was ordered olei morrh ʒi. *bis die*, and to have lig. opii sedat. ℥. x. injected subcutaneously between the tuber ischii and the great trochanter. 3rd. Says the pain disappeared immediately after the injection, but came on again about midnight, *i.e.* in eight hours, nearly as bad as ever, and continued till nine a.m., when it diminished and allowed him to sleep well. Feels now a little cramping continuous pain all down the back of the left thigh, leg, and foot, increased by pressure on any part. Can move his leg a little more. The muscles on the anterior aspect of thigh act with the interrupted current, those on the posterior are more inert. Those on the anterior and posterior aspects of leg act fairly well; appetite good, urine acid, sp. gr. 1015, not albuminous. No disorder produced by the opiate. To be faradised daily, and to have the injection every night. 4th. Passed a very good night. 5th. Can flex his leg now very well at knee, and can flex the thigh on the pelvis to a considerable extent; "all the difficulty" he refers to the space between the tuberosity of the ischium, and the great trochanter. Bowels not open; olei crotonis ℥. half; extr coloc co. gr. iij in pil. h.n. 7th. I sable to stand, can raise his limb to right angles with his trunk when lying on his bed. 10th. Is out of bed and dressed, can walk about, but his leg gives way at times with him from weakness. He is almost free from pain, did not need any injection last night. Says that he has not experienced any benefit lately from the faradisation, but that the first few times it was applied it made him feel as if the circulation was increased in his leg, as if everything was set free, and the movement restored. On applying the current myself, I observed that the muscles at the back of the thigh and leg responded but languidly to the stimulus; no better effect is produced with the primary than with the secondary current. Continue faradisation—strychniæ gr. 1-20; tincturæ ferri muriatis ℥ xv.; spt. œth. chlor. ℥ x.; aq. ʒi. *ter die*. 12th. Doing well; says he has noticed from the first that he makes perceptible advance every other day. 14th. Can walk much better; complains of a continual aching pain all down thigh, leg, and foot; it is not, however, severe enough to make him wish to have the subcutaneous injection repeated. In half an hour after taking the medicine, he experiences spasmodic pain in the upper part of his abdomen, attended with a sense of coldness there, and considerable trembling all over his body; these symptoms last three hours, then gradually subside, but recur after the next dose. He felt nothing of them before he began to take this medicine. Pulse soft, 80; appetite good. Potass. iodidi gr. i.; ammon. carb. gr. iv.; tinct. cinchon flavæ ʒi.; tinct. nucis vomicæ ℥ vi.; dec. cinchon. ʒi. *ter die*. 17th. All pain has ceased. This medicine strengthens him; agrees wonderfully well. The other "stagnated everything," made him very weak and trembling. 22nd. Has walked about the ward to-day for three hours and twenty-five minutes before he felt tired; does not feel the least pain in the limb, only a little sense of weakness just behind the great trochanter, but it is very trifling. Passes his urine quite freely now. Is going out. On being questioned as to what he thought had done him most good, he replied, "that the opiate injection quelled the pain, but the faradisation set all the circulation free, and gave him more power over the limb from its first application."

Let us remark now in this case:—1st. The *suddenness and severity* of the invasion of the disorder. So marked was this, that at first I could hardly avoid entertaining the idea that mischief had occurred in the cranial or spinal nervous centres. Though it is certainly unusual, hemiplegia from cerebral lesion is sometimes confined to the lower extremity. Andral mentions twelve such cases among a set of seventy-five. Had I not been aware how complete the loss of motor power may be in neuralgic affections, the resemblance of the patient's condition to that now alluded to would have impressed me still more unfavourably, and might have led to a wrong diagnosis. The presence and persistency, however, of the pain, as well as its peculiar situation, were sufficiently distinctive to remove speedily any doubt on this head. Abrupt commencement of disorder, at least as far as consciousness is concerned, is a feature not at all uncommon in various kinds of functional nervous derangement. Attacks of epilepsy, of angina pectoris, of asthma, and of epileptiform neuralgia, commence often quite suddenly. It seems as if a molecular change went on in the tissue, which did not interfere with its function until it reached a certain point, but that passed, normal action became impossible. So a wrought iron axle goes on slowly reverting from its fibrous condition to the natural crystalline texture of the metal, and then, when the change has advanced sufficiently, snaps asunder under a strain not at all greater than it had often borne before. The *severity* of the "retentissement" of the nervous system at the outset was very remarkable, especially as the patient was of strong and tolerant constitution, not a weakly and excitable female. Such general commotion is certainly very unusual, unless the superior nervous centres have suffered a considerable shock. You would naturally be reminded, had you been called to this patient when he was first attacked, of ingravescent apoplexy, though the absence of pain in the head and of increasing stupor would soon show that you had not to deal with so formidable an event. The next point for remark is the *locality* of the pain, which was felt all down the back part of the limb as far as the heel, but not at all in its front. How are we to explain this, seeing that a considerable portion of the sciatic nerve makes its way to and is distributed on the forepart of the leg and foot? I do not know that we can account for this at all satisfactorily, any more than we can for the general liability of all nerves to experience, when neuralgically affected, especial suffering at the point where they issue from internal cavities and become superficial. Although Romberg asserts that in sciatica, as in other cases, "the pain is perceived according to the law of eccentricity in the terminal points of the cutaneous nerves of the sciatic," yet I can by no means think that this is exclusively the case. That much of the suffering in sciatica is felt in the main nervous cord or its subdivisions, and not in their cutaneous terminations, cannot, I think, be questioned. This seems to me just as certain as that when I strike my funny bone I feel a peculiar agony in the ulnar nerve just where it has received the blow. No doubt the law of eccentricity is true, but it

is also true that pain is referred very frequently to various points in the track of a nerve trunk.

Next, what shall we say as to the *cause* of the disease in our patient. The previous history tells us nothing more than that the symptoms set in in the midst of his ordinary health, and we found nothing on examination to explain to us the reason of their appearance. Observation of the "juvantia" comes to our help, and if it does not tell us accurately what was the pathological motor, enables us at least to exclude several which have attained a classic celebrity. Thus there can be no question that constipation, neuritis, reflex irritation, gout, rheumatism, and syphilis, were not essentially concerned in the causation of the disease. We had little to do in the way of purging, and still less in administering remedies for any of the above-named diathetic conditions. No remote cause of irritation was discovered, and of course none removed. Inflammation would not have subsided under the treatment employed. It would, doubtless, be more satisfactory if I could demonstrate to you the actual cause which had been in operation, if I could prove the connexion of the malady with some recognized morbid influence. This I am unable to do; but I can remind you of an occurrence which appears to me to have a good deal of analogy with the case before us. A man is quite in his usual health, and all at once is so prostrated by influenza that he is obliged to lay up forthwith. As Sir Thomas Watson states, "the debility coming on at the very outset of the complaint is one of its most singular phenomena, taking place in some cases almost instantly, and in a much greater degree than would seem proportioned to the other symptoms of the malady which it thus ushers in." Now, debility and pain are certainly closely allied conditions of nervous disorder, and, seeing that influenza may occur sporadically, there seems to me nothing unreasonable in believing this man to have been smitten by some modification of the same cause as that which produces epidemic catarrh. Do not think that I would have you make too free with such assumptions as the one I have now ventured on. On the contrary, I pray you to be very reserved in having recourse to them, and never to do so until you have satisfied yourselves, by careful observation, of the non-existence of other more demonstrable causes of disease. At the same time I think it a matter of absolute certainty that morbific miasms do exist, more or less similar to the causes of cholera, malarious disease, and influenza, which operate not unfrequently as excitors of a great variety of nervous affections. You have just seen a girl with heart disease under my care, who for six or seven days had severe pain setting in about six A.M., and lasting till ten A.M. It affected the left side of the abdomen, and was attended with moderate diarrhœa. Bismuth and soda in mist. mucilage *ter die*, and opiate enemata at bed-time, had no effect, but the disorder yielded to five grains of quinine at six and ten P.M. This seems to have been a neuralgia of the descending colon, with serous effusion, like the lacrymation which occurs in facial neuralgia. The patient had never been exposed to malaria, as far as we could discover. Last August, a lady not subject to nervous affections, though weakly, while residing in a very healthy rural district, was taken one day with great restlessness, sense of debility, and such disorder of the head that her mind seemed to be failing her. Wine was beneficial, and with quinine she speedily got well. Disorders such as I have now alluded to are, I think, especially apt to prevail during and after cholera epidemics. The whole subject of the influence of imponderable agents on the body is one of great interest and importance. I have adverted to this point chiefly for the purpose of impressing upon you my conviction that in all instances of this kind—and they are common enough—our treatment must be simply counteractive, and not eliminative. If a poison has been imbibed, it is not one that we can remove; all our concern must be to neutralize its effects. This was what we aimed at in treating our patient. We found his limb in severe pain, and we lulled the suffering by opium; we found it palsied, and we stimulated it by faradisation. These means continued for some time were not mere palliatives; they actually availed by themselves, in no mean degree, to the cure of the morbid state. But they would not have prospered thus, you may be assured, had the symptoms depended on neuritis, or any toxic condition of the blood. In short, the pathological situation was simply this—that the vis nervosa of the sciatic nerve, or its tertiary centre, had been deranged by some temporarily acting cause, and the business of therapy was simply to recreate and restore.

Next let me advert to one point which should always guide you materially in forming a prognosis. I mean the length of time which has elapsed since the invasion of the disease. In his lecture on epilepsy, Trousseau uses the aphorism—"A maladie chronique il faut un traitement chronique." Almost always you will find it so. If our patient, instead of being ill three weeks, had been ill three years, assuredly I should not have cured him in a fortnight. Many a disease fails of being cured, not from any defect in the doctor's skill, but because either he is not persevering enough, or the sick man is not patient and confiding enough. The difficulty of curing a disease is much more proportionate to its duration than to its severity.

The *dysuria* which our patient experienced was undoubtedly not dependent on any enlargement of the prostate, or any other structural alteration, seeing that it speedily disappeared under the same treatment which cured the sciatica. How shall we account for it? There are two views which may be taken. One, that the detrusor urinæ was affected in the same way as the muscles of the palsied limb were; the other, that its paralysis was of reflex causation, just as when a neuralgia of the ophthalmic or infra-orbital nerve causes ptosis, mydriasis, or palsy of some of the muscles of the globe of the eye. This latter seems to me much the more probable view, especially as the vsenical muscles were not faradised, nor in any way subjected to special treatment.

The last point for observation in the special history of the case before us, is *the injurious effect of strychnia*. The dose prescribed was quite an ordinary one—such as many weakly females take without inconvenience, and there is no reason to suppose that any mistake had been made in dispensing the medicine. His condition appeared to me especially appropriate for strychnia, on account of the paralytic state of the leg muscles. Instead, however, of imparting to their motor nerves tone and vigour, the drug seems to have affected his solar plexus injuriously, which is the more curious, because in some instances it certainly acts very beneficially on the same centres. Here we have an example of one of the chief causes why medicine never can be an exact science—viz., because the bodily frames with which it deals are so very often dissimilar in their vital susceptibilities, in the way they are affected by different remedial agents. You give antimony to one violently delirious fever patient; it calms his brain and saves his life. You treat another in the same way, and are obliged to discontinue the medication speedily, because it prostrates the heart's action. To one sufferer opium is a "divinum remedium;" to another apparently in a like state it is the reverse. One patient bears mercury well, to another it is an utter poison. These uncertainties in the action of our remedies should not make us medical sceptics, but rather more averse to routine and alive to the exigencies of each individual.

And now for one or two general observations suggested by the history, (1) observe the *paralytic character of neuralgia*. The idea first suggested by pain is that of sensibility being aroused and excited, as one eminent writer says, "it is morbid exalted sensation." Experience has led me to look upon it as rather the reverse, and for the following reasons:—(*a*) It is very often associated with actual numbness, the two conditions appearing to pass into each other. (*b*) It is often most plainly brought on by circumstances which depress the nervous power, and is warded off by those of an opposite kind. (*c*) It is very frequently attended with motor paralysis, the muscular nerves bound up in the same trunk as the affected sensory, losing, as they did in our patient, the faculty of conveying the impulses of

volition. (2) *Pain is palsying.*—This was exemplified in our patient by the incomplete paralysis of the bladder, and instances more or less similar are not unfrequent. An elderly lady who was recently under my care with severe neuralgia of the fifth nerve, found that her face was notably drawn to the opposite side during the attacks; she had to use her hand to replace it. Dr. Latham gives three instances in which intense pain destroyed life in the way of asthenia. In one the pain was caused by lead colic, in a second by gall stones, in a third by polypus uteri. In all the heart's action seems to have been gradually arrested by the pain. In angina pectoris, when it proves fatal, the heart's action in all probability is arrested by the thoracic pang. The above proposition is included in the larger one of which I have spoken to you in the systematic lectures, viz.—that any kind of irritation operating through an afferent nerve upon a nervous centre, may more or less completely paralyse the motor nerves proceeding from it. (3) Consider the possibility of nerve disorder coming on, as in this instance, suddenly and severely *in some other more vital part.* Can any one affirm that the solar, or cardiac plexus, nay, even the brain itself, might not have been similarly affected, and if they were, might not the sufferer be brought thereby into a state of exceeding peril? This is no fanciful suggestion, I have known a man die in a very short space of time after what appeared to be his first attack of severe pain in the region of the heart. Andral records a case of intermittent coma, the attacks commencing with vomiting and violent pain of head, which resisted repeated bleeding and leeching, but yielded to quinine, and thus was evidenced to be a neurosis. In fact, I believe that nervous centres suffer from the causes of neuralgia very much as nerves themselves do, and I have found in a recent paper by Griesinger some important evidence to the same effect.

Vide, Journal of Mental Science, 1867.

Original Communications.

TRAUMATIC CEREBRO-SPINAL ARACHNITIS.

By P. C. LITTLE, F.R.C.S.I., &c.

In continuation of my remarks upon the pathology and treatment of cerebro-spinal arachnitis, published in your valuable journal of July 4th, 1866, I beg to contribute a case of traumatic origin which I recently treated.

January 12th. H. D., a gentleman aged 27, plethoric, short-set, and muscular, was suffering much from a rigid and painful condition of the muscles of the neck; a sudden twitching of those of the extremities; inability to rotate, or bend the head without much agony; pain in the back; oppression of beathing; weakness of limbs; headache; "a feeling as if his skull were opening in two;" vertigo; nervousness; fear of impending trouble; confusion of thought; scattering of vision; chilliness; sleeplessness; loss of appetite; sickness of stomach; occasional vomiting; thirst, and confinement of bowels.

His countenance appeared flushed, and anxious-looking; eyes staring; conjunctivæ injected; pupils slightly dilated, and scarcely sensitive to alternations of light; tongue clean; skin hot and moist; pulse 100, full and nervous; heart's action strong and irregular. The head and neck were curved backwards, and only moveable with intense pain. The posterior and lateral muscles of the neck felt tense and hard in tonic spasm. There were evident congestion and swelling about the spinus process of the fifth cervical vertebra, and firm pressure upon either side of it showed great tenderness. The respirations (eighteen per minute) were difficult; inspiration prolonged and audible; expiration the reverse.

The patient had always enjoyed good health up to his present illness, for which he could assign no cause. On my asking him if he could account for the pain in the back, he recollected to have injured himself in a trial of strength, a fortnight ago, in this manner:—With a quick and powerful effort he attempted to lift a heavy weight, when he sprained his spine, so much as to be unable to stand erect for a quarter of an hour afterwards. During this interval his head reeled, stomach turned, and he grew faint. He has not been well since, and has lately become so ill that he believes he is "now in for a heavy fever." I prescribed an active aperient of calomel, rhubarb, and jalap to be administered; six leeches to be at once applied over the tender region of the spine; warm poultices afterwards; low diet; no stimulants.

13th. The leeching was followed by the most satisfactory results as regards the head symptoms, only giddiness and transient pains remaining. He slept pretty well throughout the night; his spirits are improved; the bowels had been freely moved; the pulse 88, more tranquil; the features more composed and cheerful; the stiff and painful condition of the muscles persists, but is less troublesome; the neck allows of slight motion.

I then put the patient upon a short course of mercury with James' powder, merely to touch the gums, which was effected in four days. At the end of that period the muscular spasm and rigidity had ceased, but the headache and vertigo continued. A blister to the spine over the leech-bites, so completely removed these symptoms that the patient was enabled to resume his avocation in about a fortnight from the beginning of the treatment.

This case appears to be of considerable surgical interest. It is an example of cerebro-spinal meningitis, induced by accident. In this it differs from most recorded cases which have been attributed to epidemic, tubercular, or idiopathic origin. The chief grounds of my diagnosis here were the following:—

1. Opisthotonos of cervical spine.
2. Tonic spasm of muscles of neck.
3. Twitching of muscles generally.
4. Spinal tenderness.
5. Cerebal and sympathetic disturbance.
6. Irregularity of respiration.
7. History of case.

In my previously reported cases, the foregoing conditions existed in a more marked degree. Thus the muscular spasm and twitching, confusion of thought, fear of impending danger, and nervousness in the present case, were in the former intensified into convulsions and unconsciousness. Here too, the history of the case was all important in determining the exact locality of the primary lesion—an element in the diagnosis, I deem, essential to the proper treatment.

The pathological views of this disease which I ventured to publish in your issue mentioned, appear to be well-founded; and afford a basis of explanation for many of the sympathetic phenomena, relied upon by some recent observers, as pathognomonic of cerebro-spinal arachnitis.

The treatment was, indeed, pleasing in its results. As noted, it consisted in local depletion, gentle mercurial influence, and counter irritation. And here, as in former cases, I was struck with the good effects of depletion from the original seat of lesion, and convinced of the great value of an early discovery of the source from which so much distress sprung.

ON THE TREATMENT OF DELIRIUM TREMENS BY INDIAN HEMP.

By HENRY J. TYRRELL, F.R.C.S.I., M.R.I.A., &c.,
SURGEON TO JERVIS-STREET HOSPITAL.

Mr. J. K., æt. 40, was admitted into Jervis-street Hospital on the 15th of January last.

Upon examination I found him in a very excited, nervous condition; his pulse 90, very weak and compressible, pupils dilated, tongue covered with a white creamy fur, stomach very irritable, bowels confined, urine scanty and high-coloured—s. g. 1020, skin cool but sweating; although he had no sleep for the last three nights, still he was quite

rational, and gave me the history of his case (which in this country is a very interesting and unusual one) with great accuracy and minuteness. He said he was not an habitual drunkard, and remains as long as eighteen months without tasting any kind of spirit, but that when the desire for drink comes on he is unable to resist it. Some years ago, to avoid taking any, he commenced to use opium, and soon he required as much as four ounces of the tincture daily, to keep up the excitement which was requisite to enable him to pursue his profession as a newspaper editor. At no time did the opium produce a soporific effect. As the opium was undermining his constitution he gave it up about a year ago, and was a strict temperance man until about a month before he came to hospital, but during the last month he consumed a quart of brandy daily. He stated that he had had delirium tremens twice, and that on each occasion the Indian hemp cured him, and that if I wrote to Dr. White, of Downpatrick, under whose care he had been, I would find he was speaking the truth.

As the use of opium was out of the question in the present case, I determined to give the capsicum treatment a trial, and accordingly I ordered two boluses, each containing 30 grs. of capsicum—one to be given every third hour. His stomach rejected the first, the second he did not vomit; they did not give any relief, as on the next day, the 16th, he was much worse in every respect, had no sleep, and his mind was evidently affected. I ordered him 3 draughts, each containing ℥ 20 of the tincture of cannabis indica, one to be taken every third hour. He had the first at four P.M., after the second he became very excited; at eleven P.M. he got the third, and at one A.M. he fell into a deep sleep which lasted about four hours.

When I saw him at ten A.M. on the 17th, he was quite a different man; the nervous excitement was gone; he expressed himself as quite well, but very weak and hungry. During the day he drank two pints of strong beef tea, and in the evening he took another draught, as he was afraid he would not sleep without it.

He remained in hospital two days longer to recruit his health, and left on the 20th quite well. As the treatment by the Indian hemp was so satisfactory, I wrote to Dr. White to test the truth of Mr. K.'s statement, and he kindly informed me that he treated Mr. K. on two occasions with the Indian hemp, and that the effect was marvellous. The dose he gave was forty drops every hour and a-half, and that he was obliged to increase it to eighty drops before sleep was produced—altogether he used in the first attack one ounce, and in the second a little more of the tincture.

Whether there was a difference in the strength of the tincture, or that the attack for which I treated him was only beginning, it is remarkable that 60 ℥ was only required.

I am not aware that the use of Indian hemp has been adopted in delirium tremens, at least I do not find it mentioned in the books I have consulted; and I certainly would not have prescribed it, had not the patient mentioned its use to me; and although opium-eating is very uncommon in this country, at least in hospital patients, still it is of great importance to have a medicine which may be used instead of it, when that drug is unsuited from idiosyncrasy or any other cause.

Hospital Report.

THE LONDON HOSPITAL.

CASE OF LACERATION OF SKIN AND CELLULAR TISSUE IN FRONT OF PATELLA, FOLLOWED BY SUPPURATION FIRST AROUND, AND SUBSEQUENTLY WITHIN THE KNEE-JOINT; AMPUTATION.

(Under the care of Mr. CURLING, F.R.S.)

Reported by Mr. JAMES ADAMS.

THOMAS COX, aged 25, an unhealthy-looking man, was admitted on January 26th, with a laceration about three inches in length in front of left patella, which was caused by a fall from a cart-wheel on the previous evening. Immediately after the accident he went to a practitioner in the neighbourhood, who put in several sutures, and told him that it would soon be well. At the time of admission the edges of the wound were covered by a whitish slough, and surrounded by a dusky red margin. He was placed in bed, and a bread poultice was applied. On the following day there was a good deal of swelling around the joint; his appetite was very bad; pulse 100. Ordered wine ʒx., and a poultice of charcoal, as the edges of the wound were sloughy and the discharge unhealthy.

During the next eight days suppuration went on all around the joint; two free incisions were made, and the matter escaped freely; but he did not improve constitutionally, having very little appetite, and the pulse being continually about 100. After a few days more he became much weaker, and the tongue became dry and brown. On examining the knee with the finger, a rough edge of bone could be distinctly felt on the inner side of the joint. As there could now be no doubt that the joint was implicated, and the man's general health failing, it was determined to amputate, which was done on February 14th by Mr. Maunder.

The patient was very ill during the operation, but has improved steadly since; the stump is healing, and he can eat and drink well, pulse remaining steady at 70.

On examining the interior of the joint, the cartilage covering the condyles and patella was found to be removed in several places, and everywhere rendered soft, and could very easily be detached from the bone. The synovial membrane was everywhere highly injected, soft, thickened, and gelatinous. There was also a long sinus running up the front of the thigh under the muscles.

Mr. Curling in some clinical remarks on this case, noticed the rare circumstance of a suppurating wound external to the knee making its way into the articulation. He had treated many cases of such injuries without the joint suffering, being always careful to make free incisions for the ready escape of matter.

A very similar case occurred amongst Mr. Hutchinson's patients some weeks back, the patient having a lacerated wound above the knee, died from phlegmonous erysipelas, and on examining the joint the cartilage was found eroded in several places.

Foreign Medical Literature.

A CONTRIBUTION TO THE THEORY OF TUMOURS OF THE BRONCHIAL GLANDS IN THE ADULT.

By Dr. RAGNAR BRUZELIUS.

Translated from the *Hygiea* for June, 1866, Vol. xxviii, p. 217.

By WM. DANIEL MOORE, M.D.Dub. et Cantab., M.R.I.A.

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THE form of disease, for which I here claim attention, has no distinctly elaborated or complete pathology. The records of its cases have always been poor, and even the extensive medical literature of latter years has not supplied any abundant contributions to the same. Thus Fonsagrives* in 1861, in his *Mémoire sur l'engorgement des ganglions bronchiques chez l'adulte*, could not collect and bring forward more than nine cases, with the aid of which he nevertheless sought to establish the symptomatology of the disease. Had he been better acquainted with the labours of foreign writers he might indeed have somewhat increased this number, particularly as among others Dr. Cohn† a couple of years ago published some observations of

* Archives générales de Medicine, 1861, vol. ii., p. 678.

† Beitrag zur Lehre der Bronchialdrüsen-Erkrankungen. *Zeitschrift für klinische Medicin von Günsburg*, 1859, p. 376.

the kind; but even if our literature be searched with the greatest care, it will not afford any rich harvest of such cases. Most manuals of pathology touch upon this form of disease in a very transient manner; in some, even among the better and more recent, it is scarcely mentioned. The rarity of the disease, its great importance in a diagnostic and prognostic point of view, and the scantiness of the information to be had by consulting our literature, have led me to believe that an account of the following unusual case, with the addition of a few remarks, will not be entirely devoid of interest :—

Johanna Jansson, aged 32, a maid-servant, was admitted into the Seraphim Hospital on the 8th of June, 1864. She stated that her parents had died of diseases of the nature of which she was not aware, and that of four brothers and sisters two had died at an early age, but two still lived and enjoyed good health. She herself had not had any illness except an attack of ague many (14) years ago, and one nine years later of inflammation of the right eye, which had destroyed the sight of the organ and had left a staphyloma behind it. Menstruation had not commenced until she was in her eighteenth year, but it had subsequently been normal. She had since enjoyed good health until Christmas, 1863, when she began to suffer from a gradually increasing pain and tenderness in the epigastrium, whence the pain extended upwards to the chest and outwards to the back. The tenderness was aggravated by taking food ; vomiting, partly of food, partly of viscid mucus and clear, acid water supervened, but the vomited matter had never contained blood or "coffee grounds sediment." The appetite was gone; the patient's strength was diminishing, and she herself was very much emaciated.

For these symptoms, which as no tumour could be discovered in the epigastrium, and in consideration of her age, gave reason to suspect the existence of an ulcer of the stomach, she was treated in the hospital with the ordinary remedies with considerable relief. At the end of a couple of months other symptoms set in, which demanded more attention. Thus she began to be frequently troubled with an obstinate dry cough, upon which particularly violent asthmatic attacks soon supervened. They came on without any assignable cause at different intervals (three or four days or more), and lasted from some hours to some days ; she had never before suffered from any thoracic affection.

When she was transferred, in the beginning of October, to the clinical division, examination afforded the following results :—

She was considerably emaciated, had a pale yellow complexion, and a cachectic appearance. The chest did not exhibit any deformity, but the left half of it seemed to rise on inspiration rather more than the right. Inspiration, which usually took place with a certain effort, was prolonged, and was sometimes audible even at a distance, accompanied with a peculiar, sibilant, laryngeal sound. On percussion nothing abnormal could be discovered. On auscultation, or the contrary, it was found that the respiratory murmur over the upper part of the right lung was weaker than in the lower part, and in the other lung, and was attended with a peculiar, tracheal like, "coarsely sonorous" sound. Both the inspiratory and the expiratory murmurs were prolonged over both lungs, and were almost everywhere accompanied with piping and sonorous sounds, but no physical signs of solidification were met with. The pectoral fremitus, everywhere weak, did not present any difference in any corresponding part of the chest. The præcordial dulness was of normal extent, and in the usual situation, but the cardiac impulse was felt only as a slight blow against the thoracic wall in the fourth and fifth intercostal spaces ; the sounds of the heart were weak, but without any accessory sound. The pulse gave 80 strokes in the minute, was small and even, and perfectly contemporaneous in both radial arteries. The expectoration was scanty, and of a catarrhal nature ; on repeated examination with the microscope it was never found to contain any elastic tissue from the lung. The voice was rather croupy and weak, but with an effort the patient could speak aloud and distinctly. On examination with the laryngoscope nothing abnormal was observed. She complained almost constantly of dyspnœa ; this was, however, tolerable between the asthmatic attacks. At night she was sometimes troubled with perspiration. In the epigastrium, which was rather tender on pressure, no tumour was observed, but there was a certain resistance on the right side in the left lobe of the liver. The examination of the liver and spleen did not reveal anything morbid in these organs, nor did the urine present any abnormity. The appetite was tolerably good, the tongue clean, and the bowels were regular.

Her state improved somewhat for a couple of weeks ; the attacks of cough and dyspnœa ceased, as did the vomiting, on which account, although very weak, she perseveringly requested to be dismissed, which was done on the 15th October. After a few days she again begged to be taken into hospital. The day after her dismissal she had got a violent asthmatic attack, which still continued when she presented herself anew at the hospital. The dyspnœa and cyanosis were then so severe that suffocation seemed every moment to be imminent. She was taken in ; suitable treatment was adopted, and the attack soon subsided.

As to the *diagnosis*, it was, as is evident from the foregoing history, surrounded with difficulties. Certain of the physical signs were but slightly marked, others varied considerably in intensity. Repeated investigations were required to determine them to be such as they are above reported. I endeavoured, however, in the following manner to come to a conclusion as to the nature of the disease :—

The prolonged, often noisy, inspiration and expiration, combined with the difficulty with which the respiration in general is carried on, point to some obstruction to the passage of the air through the organs of respiration. The patient's power of speaking loudly and clearly, even though with some effort, shows that the larynx is not essentially affected, on which point, moreover, the laryngoscope is capable of supplying perfect certainty. On the other hand, the constant feebleness of respiration over the upper part of the right lung, compared with the clear sound on percussion in the same place, is a proof that the obstruction must affect principally the right bronchus, but that the part of the lung just mentioned nevertheless contains air. Some constriction of the larger air passages must therefore exist, and if we take into account also the violent asthmatic attacks which occur without any assignable cause, and cannot be dependent upon an emphysema, nor upon an aggravated catarrh, it becomes probable that some tumour exercises pressure partly on the larger bronchi, and partly on the nerves of the respiratory organs.

Having in this manner made the diagnosis of a tumour causing pressure on the thorax, it remained to answer the second question—of what nature that tumour was. An aneurism may certainly produce such symptoms. I, however, thought myself justified in excluding it, as neither by percussion nor auscultation did I discover any signs indicative of such a lesion, nor did the state of the pulse yield any support to such an assumption. It consequently appeared to me to be most probable that the bronchial glands were the seat of some morbid process, by which they were increased in size, so as to be able to exercise a pressure sufficient to produce the existing symptoms. In such a case a cancerous or so-called tubercular process would most readily suggest itself. Cancer I thought unlikely, chiefly on account of the patient's age (only 32 years), and the absence of any sign of such a disease in other organs; for so long as the gastric symptoms were so undefined as they were in the commencement, I must acknowledge that I did not suspect that they depended on cancer of the stomach, which, nevertheless, during the course of the disease, became more evident.

So-called tuberculosis of the bronchial glands therefore remained as the most probable condition, though this is a name under which morbid processes differing from one another, at least in an anatomico-pathological point of view, have been grouped together. Independent miliary tuberculosis in the bronchial glands, without similar deposition in the lungs, occurs in children, and is said to be met with also in adults. The description of these latter cases is,

however, in general not so detailed and distinct as to remove all doubt as to the nature of the disease. It may consequently be asked how far an independent miliary tuberculosis in the bronchial glands has been actually observed in adults. I at least have not succeeded in finding any case on record which unquestionably bears the stamp of it. In our patient, of course, we could not with full certainty exclude tuberculosis in the lungs, but on the other hand it was evident from the physical examination that, if it were present, it had caused neither any considerable condensation nor cavernous formation. This circumstance led me also to suppose that the enlargement of the bronchial glands was produced rather by a simple hyperplastic process than by actual tuberculosis.

As to the further course of the disease, a few short statements will suffice:

After her readmission into hospital, she remained there under treatment for many months, and until her death. The symptoms from the respiratory organs remained, varying in intensity, but the dyspnœa gradually increased, and only during short intervals did she feel something better. In the month of February she was attacked with fresh inflammation in the eye which had before been affected, ending in suppuration and atrophy of the bulb. During her stay in the hospital the abdominal symptoms underwent no inconsiderable change. Thus the resistance formerly noted in the epigastrium was gradually developed into a considerable tumour, situated near the left edge of the liver, which became at last as large as an egg, was easily felt, uneven, and knobby, tender on pressure, and somewhat moveable. Notwithstanding this, the intensity of the other gastric symptoms diminished; the vomiting recurred, only at longer intervals; the appetite was certainly not good, yet it had not altogether failed, and to the very last the patient daily used a tolerably fair share of food. No decided sign of pyloric constriction was ever observed, and the vomited matters never contained blood or any other "suspicious" substance. Her state, meanwhile, became more and more miserable, her strength diminished, the emaciation progressed, and during the last eight days a considerable pleuritic effusion took place on the right side, which terminated her sufferings on the 27th of March, 1865.

At the post-mortem examination, which was made by Dr. Odmansson, the following was noted:—

Body considerably emaciated. Cadaveric rigidity in all the large joints. The fat in the subcutaneous connective tissue has for the most part disappeared; what remains of it is of a brownish-yellow colour. The muscles are flaccid and pale.

The skull is long but narrow. Its bones are of ordinary thickness, the dura mater is rather congested. In the anterior part of the superior longitudinal sinus a dry fibrinous coagulum, more than an inch in thickness, loosely adhering to the wall, mostly decolorised, with incipient softening in the centre, is met with. In the posterior part of the same cavity, as well as in the transverse sinus, are loose sanguineous coagula. The arachnoid and pia mater are here and there, between the convolutions, infiltrated with clear fluid in small quantity. All parts of both the cerebrum and the cerebellum are exsanguinous. The cerebral substance is moderately firm.

The right pleura contains a large quantity of an almost clear fluid, tinged with green. The lung is compressed, and is pushed backwards and inwards. Both the pulmonary and the parietal pleura are invested with a thin, in general easily separable, false membrane. Each is connected with the other by adhesions, which, unusually delicate, almost resembling a spider's web, extend through the fluid. In the left pleura a less quantity of a similar fluid is found. On the surface of the right lung, in the false membrane, a small number (ten or twelve) of rounded nodules, varying in size from that of a millet to that of a pea, consisting of a homogeneous, whitish yellow tissue, are seen. The serous investment of the left lung in general exhibits some thickening. The compressed right lung contains some air throughout, except in the postero-inferior part. It is exsanguinous, rather highly coloured. The bronchial mucous membrane is pale, the tubes on pressure yield a slightly purulent fluid. The left lung contains a moderate amount of blood, and air everywhere except in the postero-inferior part. This part is flaccid, carnified. The state of its air tubes is the same as that of those on the right side. The mucous membrane of the larynx and of the upper half of the trachea is pale, and covered with mucus. The glandular openings in the latter place are enlarged. In the lower half of the trachea and in the principal bronchial tubes the mucous membrane is thickened and congested. In the middle and posterior part of the former an opening, surrounded with swollen edges, appears in the wall—this opening is two centimètres in length and half a centimètre in breadth, and leads to a cavity nearly as large as a walnut, bounded by decomposing, cheese-like walls. A smaller perforation of the same nature is met with precisely at the bifurcation. A bundle of enlarged lymphatic glands, in a state of caseous metamorphosis, here and there coloured black, surrounds the whole posterior half of the lower third of the trachea. Some of these glands, in process of breaking up, constitute the boundary of the above-mentioned cavities. Both principal bronchi, especially the right one, are imbedded in altered glands. The right bronchus is, near its entrance into the lung, rather compressed, and has an elliptical bore.

The heart is everywhere intimately adherent to the pericardium. The medium of connection between them is congested connective tissue, forming a layer of unequal strength at different parts of the heart; this is strongest over the left ventricle. Both in this newly-formed tissue and on the parietal layer is found a number of rounded or oval nodules, in general varying from the size of a pea to that of a filbert, sometimes a little smaller or larger, closely connected with surrounding parts. Of these the smaller exhibit an even, shining, tolerably transparent surface of section, with a small yellowish spot in the middle or nearer to the periphery; the larger, on the other hand, show a drier section verging upon yellow. All have a firm consistence, but the larger vary somewhat in this respect. They are met with in the greatest number over the left ventricle. On the upper part of the latter, near the septum, appears a stratum, one and a half centimètres in breadth, between the two laminæ of the pericardium, entirely composed of such a mass. This mass is not defined towards the muscular structure, but muscular fasciculi are seen to run in and lose themselves in it. Equally large masses are met with between the pericardium and the lower part of the pulmonary artery, between it and the right auricle. Around the heart, particularly its base, lies a number of enlarged lymphatic glands of the same nature as the bronchial glands above described. Between some of these and the tumour exists (seen microscopically) a considerable similarity. At the base of the heart they lie here and there close upon one another, separated only by a thin layer of connective tissue.

The right auricle contains some thin dark blood. The right ventricle, as well as the left side of the heart, contains some small coagula of blood. The length of the left ventricle, calculated from the middle of the attachment of the right aortic valve, is about seven centimtères (about 2·5″); the thickness of the wall near the septum is from twelve to thirteen millimètres (about half an inch). The muscular structure of the heart is flaccid, pale, with a yellowish brown shade of colour. In the anterior lobe of the mitral valve are a couple of yellowish-white sclerotic spots. The valves are otherwise healthy.

The peritoneal cavity contains more than three pints of a clear fluid with a greenish tinge. The transverse and the descending colon are in the left curvature attached to one another by an old firm adhesion of about three inches in length.

The liver is pushed downwards, is free from adhesion to the surrounding parts, it is rather small, somewhat congested, flaccid, of moderate consistence. In the middle of the right lobe some firm calcareous concretions, of irregular

shape, are met with deep in the parenchyma. The gall-bladder, attached superiorly by a long string of connective tissue to the stomach, contains a small quantity of thin, green bile.

The spleen is small, everywhere closely attached to the surrounding parts. Its capsule is considerably thickened, inferiorly it is of a white colour and cartilaginous nature. Its substance is pale, firm. The Malpighian bodies are indistinct.

The capsules of the kidneys are firmly attached. Their surface is even, but slightly granulated. The cortical substance is rather thin. This, as well as the pyramids, with the exception of the papillæ themselves, which are pale, contains a moderate amount of blood. The finer division of the cortical substance is distinct; the substance, with the exception of small yellowish grey spots on the septa fasciculorum is of ordinary transparency, its consistence is particularly firm.

The pyloric portion of the stomach is hard to the touch. The calibre of the pylorus is much constricted, allowing only the little finger to pass. The walls here, as in the antrum pylori, are enormously thickened, measuring on section in many places an inch or upwards. The thickening affects all the constituent tissues, but principally the sub-mucous, which exhibits a gelatinous, shining, transparent surface of section, traversed by fine, white septa, which, from the outer part of the sub-mucous tissue, radiate towards the inner surface of the stomach. The mucous membrane exhibits in the greater part of this portion superficial loss of substance. In the parts surrounding the seat of thickening too, small superficial defects are met with. Directly over the lesser curvature, and intimately adherent to the wall of the stomach, lie a couple of tumours as large as walnuts, presenting the same appearance as the sub-mucous tissue described above. The omental attachment is considerably thickened.

Some of the upper lumbar glands are enlarged; the surface of section is caseous, here and there it is loose.

The mucous membrane of both the small and large intestines exhibits spots of tolerably intense venous injection, but is otherwise unchanged.

The ovaries are rather small, round, with particularly uneven surface, and present everywhere on section a shining homogeneous appearance. Near the surface are some few corpora nigra. There is nothing else to remark upon.

In order to render this report of the post-mortem examination more complete, I shall here append the result arrived at by Dr. Odmansson, after an accurate microscopical examination, as to the nature of the tumours met with in this case (*Förhandlingar vid Svenska Lakaresallskapets sammankomster ar*, 1866, p. 6). "The tumours in the stomach and omentum represented a typical alveolar or colloid cancer. The change in the lymphatic glands indicated, according to his view, the second and third stages of lymphatic glandular scrofula, as both the macroscopical and histological state of these organs negatived the assumption of any properly malignant swelling, such as cancer or sarcoma; as no miliary tuberculosis was met with elsewhere, nor could the changes in the lymphatic glands be shown to have proceeded from miliary tubercles; and, as the change, though limited to a certain group of lymphatic glands, those situated within the thorax, nevertheless here occurred so extensively, and in so high a degree. The tumours in the pericarditic and pleural new formations of connective tissue depended on a proliferation of small round cells of the appearance of lymph-corpuscles proceeding from the connective tissue bodies. In the somewhat larger tumours only the outermost zone exhibited this condition, while in other parts the newly-formed cells had already undergone fatty degeneration and breaking up. Where the tumours penetrated into the muscular structure of the heart the same small indifferent cells appeared among the muscular filaments. A tumour at least macroscopically similar is described by many writers under the name of 'tubercular pericarditis,' 'tuberculisation of pericarditic false membranes,' &c. In our case the affection would undoubtedly have been looked upon by these writers as tubercular. If we entertain the views of the North German school, or those of Virchow, doubts must occur as to the assumption of the tubercular nature of these tumours. No actual miliary tubercles are met with; the tumours have evidently grown by an uniform proliferation in their vicinity, and moreover miliary tubercles are not found in other organs. It is well known that Virchow, in the last number of his *Onchologie*, very accurately describes syphilomata. According to his view our tumours ought rather to be referred to this last-named form. In addition to reasons just quoted, the appearance and transient nature of the cells are in favour of this opinion, as well as the circumstance that the tumours have been developed in the midst of the new formation of connective tissue, which circumstance is characteristic of syphilomata, though not solely or always belonging to them. We may, however, on the other hand, observe that the assumption of the syphilitic nature of the tumours is venturesome, as there are no other symptoms of syphilis, and the patient's antecedents do not justify such an opinion, as syphilitic tumours in internal organs cannot yet be looked upon as sufficiently known, and as the enlargement of a tubercle merely from the juxtaposition of miliary tubercles cannot be considered to be fully proved. Moreover, we have in lymphatic glands a process which, if not identical with tuberculosis, is nevertheless closely allied thereto."

We thus find, on post-mortem examination, not merely the tumours diagnosed during life, in the stomach and bronchial glands, but also a third form, in the heart, the proper nature of which cannot with full certainty be determined. Notwithstanding that these tumours in the heart were very considerable, both in number and size, this organ never during life presented any symptoms whence we could infer it to be the seat of such a pathological process. The cardiac sounds were indeed, although physiological (pure), weak, as was the heart's impulse, but this phenomenon could very well be explained in connexion with the state of weakness in the whole system, which was in this case evident. As no other signs of a defective action of the heart were observed, we cannot be surprised that this change in that organ was not diagnosed. The perforation of the bronchi, which was produced by the ulcerative process in the glands, was not distinguished by any prominent symptoms (for example, more considerable hæmoptysis), though the latterly somewhat increased expectoration of a purulent, sometimes slightly blood-coloured secretion, ought to be attributed to the spread of the ulceration to the air-tubes.

To this account of the case, and of our line of diagnosis, it will not be unsuitable to add, for the sake of comparison, a short review of the more important symptoms, which have been observed by others in similar cases (of bronchial glandular tumours).

All are agreed that the symptoms are at first inconsiderable, and where the enlargement of the glands is but slight are ill-defined. As the glandular tumours are most frequently (the tubercular) accompanied with tubercular deposition in the lungs, it is the latter which usually attracts the attention of the physician, and produces such manifest symptoms that the glandular disease is overlooked. It is not until the latter have attained such a size that they exercise considerable pressure on the air-passages, the large vessels, the nervi vagi, or the other organs in the thoracic cavity, that the disease assumes a peculiar type, and a diagnosis becomes possible. *Cough* is, however, one of the first symptoms, though it is not until the disease is more advanced that it acquires a special character. It is usually dry and irritating, as it were spasmodic, comes on in fits, and has sometimes a hollow or rough sound. The expectoration is, at the same time, *nil*, or extremely scanty, and of a catarrhal nature. Our patient was, it is true, troubled with a dry, irritating cough, but we never observed anything peculiar in it, except during the asthmatic paroxysms. The *pains* in the chest are ordinary, but vary. Sometimes inconsiderable, as merely a feeling of pressure; they may, in others, be extremely violent. Our patient

seldom complained, so far as the chest was concerned, of anything but dyspnœa, but this scarcely ever left her.

The voice most frequently exhibits nothing unusual, with the exception of a certain weakness, which may, however, sometimes pass into complete aphonia from pressure of the tumours on the recurrent nerve (Aphonia paralytica)? In our case the voice was always rather rough, and to speak loudly and distinctly invariably required evident effort. Yet the laryngoscope never revealed any defect of mobility in the vocal apparatus.

In this, as in other thoracic affections, the signs afforded by physical examination of the chest are the most important. It is generally stated that the *respiration* exhibits nothing abnormal except during the asthmatic attacks, but in this case it was evident that it was always attended with a certain amount of difficulty, and when forced it produced a peculiar tracheal sound. As is observed in the history of the case, the breathing was, moreover, often audible at a distance, and frequently it was accompanied with a sound suggestive of the existence of constriction of the larynx. But this was most intense during the violent attacks of dyspnœa, which more than once attained such a height as apparently to threaten suffocation. Such asthmatic attacks are not unusual in this disease; in this instance they were the first symptom which directed attention to the affection of the chest. During them, inspiration and expiration may assume such a character that we might be tempted to suspect the existence of some more severe laryngeal affection, a mistake which Fonsagrives acknowledges he was once very near committing, as he believed that in such a case he had to do with œdema glottidis.

In children very important information may often be obtained from percussion, when it is possible to establish the existence of a circumscribed dulness, indicating the situation, and perhaps even the size of the tumour. In adults it is a rare exception that the swelling attains such a size that any alteration of the sound on percussion ensues, but in the very circumstance that this is normal, while the other symptoms indicate a severe affection, lies something very peculiar, which deserves all attention.

Fonsagrives lays great weight on accurate palpation, by which we shall often be able to establish the existence of an increase of the thoracic vibrations, or of frottement in a limited space, in some of the sub-clavicular regions. As to increase of the thoracic vibrations, F. thinks that probably the strong, purring, or sonorous râles, which are often met with in such cases, may be perceived also with the hand, for there can be no question of any increase of the vocal vibrations in the chest unless the tumours have attained such a size as to compress and condense a great portion of the lung, which is extremely rarely the case. How frottement can be caused by such tumours it is difficult, nay impossible, to see. It is true that Laennec has put forward the assertion that nodules of a tubercular or other nature, if of a certain size and projecting above the surface of the lung, may give rise to friction sounds, but this also has been called in question by more recent investigators. I cannot say whether Laennec's authority has had any part in the quoting of this symptom by Fonsagrives; by no other author have I found it mentioned.

Auscultation affords in general the most reliable signs, although precisely with respect to these, observers seem to be least agreed. That, as a result of any more considerable constriction of the larger bronchial tubes, aeration shall be diminished in the part of the lung to which the constricted air-tube leads, and that the vesicular murmur shall there in the same measure lose in strength, seems to me to be, *a priori*, quite clear, and is also fully confirmed by experience. Others, too, usually state that such is the case; but, nevertheless, Fonsagrives thinks, with respect to bronchial tumours, that "weakness in the respiratory murmur is rather theoretically deduced from the nature of the disease than established by experience." But Andral had before directed attention to this change in the respiratory murmur, and had based on this very point his diagnosis in a similar case (compressing glandular tumour in the thorax). Fonsagrives, on the other hand, describes, as especially characteristic, great sonorous, stertorous (à timbre ronflant), râles, constantly fixed in a certain part. In our case, too, a *strong tracheal-like sound* was observed over the anterior part of the lungs, which often completely masked the other auscultatory phenomena. Other writers have not, however, in similar cases, observed any such sounds, and Duchek (*Handbuch der speciellen Pathologie und Therapie* i, p. 424) considers that a prolonged râle on inspiration or expiration is by no means met with in all cases. However this may be, it is certain that this peculiar, if we will, stertorous sound, from the very commencement in this case fixed my attention and contributed to the establisment of the diagnosis.

In conclusion I will add that these tumours may sometimes produce, in consequence of pressure on the large venous trunks in the thorax and on the œsophagus, very important symptoms, which greatly facilitate the diagnosis.

Reviews.

GLEET: its Pathology and Treatment. With a Memorial on the Treatment of Stricture of the Urethra by Subcutaneous Division. By Henry Dick, B.A., M.D., Surgeon to the National Orthopædic Hospital. Second Edition. Pp. 113. London: Hardwicke. 1866.

The treatise on Gleet is the result of many years' observation, and Dr. Dick's object in publishing it is to elucidate some essential points which he considers to be often neglected. The Memorial on the Treatment of Stricture of the Urethra by Subcutaneous Division was read before the Medico-Chirurgical Society, and the peculiar method devised by the author is described; but Dr. Dick wishes it to be understood that he does not propose the subcutaneous division in all cases of stricture, but only in exceptional instances.

A PRACTICAL TREATISE ON FRACTURES AND DISLOCATIONS. By Frank Hastings Hamilton, A.B., A.M., M.D., Professor of the Principles of Surgery, Military Surgery and Hygiene, and of Fractures and Dislocations in Bellevue Hospital Medical College, New York, &c. Third Edition, revised and improved, pp. 777. Philadelphia: H. C. Lea, 1866.

This excellent treatise has passed so rapidly through two editions that a third has been imperatively demanded, and in its preparation Dr. Hamilton has been assisted by Dr. John Winslow, of New York, to whose zealous co-operation he pays an appropriate tribute. He has also added a considerable number of observations from his own private practice, and from that of the Bellevue and Charity Hospitals in New York, and the chapter on gunshot injuries has been enlarged by the addition of a few statistics obtained from the published records of the United States and Confederate armies. These sources must have supplied an enormous mass of contributions to the surgery of Fractures and of other surgical injuries, but, as is usual in great campaigns, the majority of surgeons are too much engaged in the practical duties imposed upon them to have much leisure for writing the results of their experience. Dr. Hamilton's book is illustrated by no less than two hundred and ninety-four woodcuts, illustrating the anatomical characters of the fractures and dislocations described, and also the different methods of treating these injuries, and the various mechanical appliances employed in their management. The treatise is very creditable to the character of American Surgery.

NOTES ON HEALTH IN CALCUTTA AND BRITISH EMIGRANT SHIPS, including Ventilation, Diet, and Disease. By W. H. Pearse, M.D.Edin., Government Emigration Service. Pp. 160. London: Churchill and Sons. 1866.

This is a thoroughly practical little work on a very important subject in which the author has had a very considerable experience. It is illustrated by tables, which must have been collected with great labour, relating to various medical statistics of life and disease on board ship, together with many useful suggestions for the preservation of the one and the prevention of the other.

CHOLERA: its Seat, Nature, and Treatment. By CHARLES SHRIMPTON, M.D., Chevalier de la Légion d'Honueur, &c. Pp. 109. London: Churchill and Sons. 1866.

A TREATISE ON THE ORIGIN, NATURE, PREVENTION, AND TREATMENT OF ASIATIC CHOLERA. By JOHN C. PETERS, M.D. Pp. 162. New York: D. van Nostrand. 1866.

ON MALIGNANT CHOLERA: its Origin, Pathology, Treatment, and Mode of Prevention. With an Appendix on Cattle Plague as compared with Cholera and other Human Maladies. A Letter on Homœopathy; its false inferences and hollow Assumptions. With an Essay on the Present State of the Medical and Veterinary Professions in this Country. Pp. 135. London: Hardwicke. 1866.

The treatise by Dr. Shrimpton was originally written in French, and is evidently founded upon experience gained in France, although copious references are made to other sources of information. The author's opinion as to the nature of cholera is, that it is due to an affection of the nervous system of organic life, that it seizes the whole organism at once, that its influence penetrates the most intimate structures of the body, and that it alters the state of vitality in the elementary cells which constitute the organic tissues. He repudiates the idea of contagion being a means of propagating the disease, and therefore condemns the adoption of quarantine laws for its prevention.

Dr. Peters, who is an American physician, has witnessed the epidemics of cholera in 1849, 1854, and 1866, and has seen every variety of treatment practised at the cholera hospitals. He considers that the disease is portable and communicable, that the quality of infectiousness belongs peculiarly, if not exclusively, to the matters evacuated by the patients, and that the true counteracting and remedial agencies are to be found in the processes of disinfection. He urges the maintenance of a strict quarantine at the ports where cholera is likely to be imported.

Dr. Edwards Crisp's *brochure* consists—first, of an Essay on Malignant Cholera, read at the Medical Society of London in 1849, and which contains some very elaborate statistics, and some bold and original views. Dr. Crisp is entirely opposed to the so-called eliminative treatment of cholera. The second part of the pamphlet is an appendix on a number of subjects of interest to the profession and the community. In reference to the cattle plague, Dr. Crisp has collected a great amount of information, and his vigorous letters exposing the shallow sophistries and absurdities put forward by the *Times* at the period when the cattle plague was beginning its ravages, will be read with amusement and interest. It is to be hoped that his arguments made some impression on the persons to whom they were addressed, but whether they did or not, they will well repay perusal. His exposure of homœopathy is excellent, and ought to convince even the homœopathists themselves of the fallacy of their tenets.

A STATISTICAL INQUIRY INTO THE SANITARY CONDITION OF KINGSTOWN. By Dr. THOMAS MORE MADDEN, M.R.I.A. Dublin: J. F. Fowler. 1867.

ON INSANITY AND THE CRIMINAL RESPONSIBILITY OF THE INSANE. SAME AUTHOR. Dublin: J. Falconer.

THE first pamphlet consists of a posthumous letter by the late Mr. C. Halliday to the Commissioners of Kingstown, with introductory observations by Dr. Madden. Unlike letters, which contain their essence in the postscript, in this case it is the introduction which is the most important. After our late visitation, and the apparent deplorable state of Kingstown in a sanitary point of view (we use this expression on the authority of Dr. Madden), these observations come most opportunely.

At page 8 the author gives the localities where the seventy-three adult deaths were distributed; also the localities and number of sick calls. These two lists bear a certain relative proportion, and it is a pity that a third column was not introduced, giving the number of inhabitants in each street or locality, otherwise these tables do not give much information to those who are not well acquainted with the town.

A case in connection with disinfection by carbolic acid is here mentioned which has happened more than once—namely, that the permeation of organic poison in the form of sewage, &c., into wells was discovered by the use of the disinfectant. This is a decided advantage possessed by this antiseptic, for it is not itself poisonous when diluted, but a very minute quantity disseminated through a very large bulk of water gives a disgusting taste to the latter. Thus, when mixed with sewage it acts as an indicator to the palate of the presence of its tasteless but poisonous companion.

We recommend Dr. Madden's book particularly to the consideration of all interested in Kingstown or its neighbourhood, if for no better reason, for that of self-interest. It must be borne in mind that for a short period cholera raged in this small town with greater virulence than in London or Dublin.

In the second pamphlet the author's views are perhaps best explained by the following quotation from page 10. The author is not one who thinks that all crime is the result of partial insanity. Mere passion is not madness, but criminal responsibility does not exist with the insane:—

"Nor should any so-called irresistible impulse, not connected with a diseased brain, nor any emotion or custom which is not of itself a proof of insanity, be considered as conferring immunity from the just punishment of crime. None are free from passions or impulses, which, if they be not checked, may become almost irresistible from habit, and may lead to crime; but in such cases the perpetrators of crimes being accountable for the acts by which the control over the passions was originally weakened, they are equally accountable for all the consequences that may arise therefrom. A madman is not thus responsible, not being answerable for the diseased action in his brain whence the insane act proceeds."

Both those pamphlets will be read with interest.

THE STORY OF THE TRUCK; OR, THE WHY AND WHEREFORE OF CATTLE DISEASES. By WM. REID. Edinburgh. 1867. pp. 140.

WE have read Mr. Reid's pamphlet with much satisfaction as well as regret. Satisfaction at finding so practical and simple a remedy suggested for the prevention of the great cruelty to which cattle are subjected on many lines of railway—namely, the privation of water for long periods—in some cases, as Mr. Reid tells us, of "from forty-eight to sixty hours;" and regret that this pamphlet should still be necessary to call attention to so great a cruelty. If we have the right to kill cattle for our use, we have assuredly no right to torture these dumb creatures beforehand by the slow torment of unsatisfied thirst. That it is as impolitic as it is inhumane to do so is evident, for cattle brought up to the market from remote districts without water frequently arrive in a state of fever which renders the meat unwholesome and innutritious, as well as lowers its market value. Therefore, on the ground of public health, as well as on the score of humanity, we should be glad to see the use of Mr. Reid's railway water-truck, or some other equally good system for supplying cattle with sufficient water during all railway journeys, rendered compulsory by law.

OBSERVATIONS ON THE COMPARATIVE ADVANTAGES OF AFFORDING OBSTETRIC ATTENDANCE ON POOR WOMEN IN LYING-IN HOSPITALS AND IN THEIR OWN HOMES. By DENIS PHELAN, M.R.C.S. London. Late Poor-Law Medical and General Inspector.

THE subject discussed by Mr. Phelan in these "Observations" is one on which it is extremely difficult to arrive at a satisfactory conclusion. Mr. Phelan treats the subject under two heads:—"1st. Which mode of attendance is the least expensive, assuming each to be efficient; and 2ndly. By which is there less loss of life of mothers and children?" On both these points Mr. Phelan's conclusions are in favour of attending parturient women in their own houses as a general rule. He says:—

"It seems to follow from the foregoing data and observations that one mode of lessening the mortality of lying-in women in hospitals is, to limit the admissions to the classes that more particularly require hospital treatment, and to give extern attendance to those that do not. This opinion has been expressed in reference to the Rotundo by four different Boards of Commissioners, which have examined and reported on it, and is expressed by the commissioners appointed to report on the Dublin hospitals in 1855."

Mr. Phelan's statistics are all taken from official and published documents, and some of the facts adduced by him from these sources are very remarkable. We shall quote a few lines from pp. 7 and 8:—

"The Dublin Rotundo Hospital Statistical Table shows that 8224 births took place in that institution in the seven years

ended 1864, and that 252 mothers died, which is one in thirty-two two-fifth births. During these seven years 3142 deliveries took place in the Coombe Lying-in Hospital, and 45, or one in 70, died."

"During the seven years ended 1864, 617 women were attended from the Dublin Rotundo Hospital, and ten, or one in 62, died."

"During the same seven years the Coombe medical officers attended 4473 at their homes, with the loss of twenty mothers, or one in 223."

Without in the least undervaluing the amount of labour and perfect accuracy evinced by Mr. Phelan in every page of this important essay, we would venture to remind him that all medical statistics are more or less open to the charge of fallaciousness, no matter what pains the compiler may take to ensure their accuracy. And we who have had occasion in our time to attend labours in some of the poorest quarters of Dublin, and have had to witness the indescribable scenes of squalid poverty and misery in which the wives of the poor so often have to bear the throes of parturition, cannot but contrast with this the comforts, the unfailing kindness, and the eminent professional skill with which these poor women are treated in the Rotunda Lying-in Hospital. Most sincerely do we trust that this great institution, the noble monument of the humanity and charity of an Irish physician, may long continue to contribute to the alleviation of the suffering poor of Dublin. To the enlightened physicians who preside over that excellent institution, and to all others interested in the important question we are now considering, we would recommend the perusal of Mr. Phelan's very able and valuable paper, although we must add that we do not coincide in all his views.

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The Medical Press and Circular.

"SALUS POPULI SUPREMA LEX."

WEDNESDAY, MARCH 13, 1867.

THE ACCOMMODATION OF PAUPER LUNATICS.

The report, which appeared a few days since in the daily papers, of a conversation held at a late meeting of Middlesex magistrates, on the subject of some irregularities at the Colney Hatch Lunatic Asylum, forcibly impresses upon the mind the unsatisfactory arrangements at present made for the reception and care of our pauper lunatics. In the particular instance to which we refer, it was shown that some of the inmates of the Asylum, who were especially dirty and disorderly, were subjected to some species of punishment or coercion, which, however, was entirely disapproved by the Commissioners in Lunacy, who expressed their disapprobation in very strong terms, and intimated their hope that no such repressive measures would again be adopted.

Now, without in any way disputing the views held by the Lunacy Commissioners in this case, we cannot help remarking upon a point which must have struck any one who has visited either or both of the great County Asylums of Middlesex—namely, the enormous size of these institutions, and the great multitude of patients confined within their walls. When we are told that 900 insane patients at Colney Hatch are placed under the care of a single medical man, we can easily believe that he has had imposed upon him a labour far greater than any one man can perform. The mere classification of such a crowd must be a matter of difficulty, the prevention of irregularities among such an assemblage must be often impossible, while individual attention to each case is wholly out of the question. Hence the cases must be taken in groups, and while the quiet patients may be in general safely left without much supervision, the noisy and the dirty ones must almost of necessity be segregated from the rest and placed under some sort of control, in order to prevent mischief.

When we view such an institution as the Colney Hatch Lunatic Asylum, with its 2000 patients, or thereabout, and its *two* superintending Medical Officers, we are only amazed that irregularities do not more frequently occur; while it is hopeless to expect from such officials, so thoroughly over-worked, any additional contributions to our existing stock of psychological knowledge, or indeed any very energetic or sustained efforts to alleviate the mass of mental disease placed under their supervision.

If a Medical Superintendent were to devote his whole twenty-four hours exclusively to the patients under his care, he would have less than *two minutes* a-day to bestow upon each of the nine hundred lunatics placed in his charge; but when it is considered that a medical man must eat and sleep like other human beings, to say nothing of reading and exercise, it is obvious that he cannot satisfactorily do his duty, more especially when he has to write out reports, to superintend the nurses and warders, to receive new patients, and to discharge old ones, besides the host of other routine duties imposed by his position.

Notwithstanding, however, the crowded state of the Middlesex Lunatic Asylums, and indeed of many other Lunatic Asylums in England and Wales, the English Lunacy Commissioners are still using all their endeavours to crowd still more of the insane population into these institutions, and even to visit with punishment persons who detain pauper lunatics in private dwellings. The consequences have been that the Asylums have become so overcrowded as to be in many instances almost unmanageable, as far as classification and treatment are concerned, and that those who cannot be received within them are kept in the Workhouses or are sent to Private Asylums. Again, in consequence of the great kind-

ness very generally and most properly bestowed upon insane patients in the County Asylums, the liberal diet accorded to this class of persons, and the excellent hygienic arrangements adopted in the buildings, the relatives of insane paupers are often too glad to avail themselves of the facilities afforded them of getting rid of their incumbrances, and shifting from themselves to the general public the cost of their maintenance. Thus, in comparing the statistics of lunacy in the present day with those of former times, it would appear as if lunacy was on the increase beyond the proportion indicated by the increase of the population; whereas, although there can be no doubt that lunacy has really increased very much of late years, yet the apparent excess is mainly due to the fact that the insane persons, formerly kept by their relatives in private houses, are now sent in far greater numbers than formerly into the public asylums.

Among this great crowd of insane paupers, the curable cases bear but a very small proportion to the incurable, the latter including a great multitude of patients who are afflicted with chronic imbecility or dementia, who are in no way dangerous either to themselves or others, and who live probably to a great age, and thus occupy the space, and involve the expense, and command the care which would otherwise be bestowed upon cases of a more recent and hopeful, though perhaps more immediately dangerous character. The latter cases are therefore, of necessity, often kept in the Workhouses, at least for some days or weeks, while room is being made for them at the Asylums, and the period of doing them good is thus allowed to slip away.

The Workhouses, unable to relieve themselves of the pauper lunatics by drafting them into the Asylums, are often necessarily obliged to keep them; and then arises the clumsy compromise made between the Poor-law Board and the Lunacy Commissioners and the local Guardians, whereby it is allowed that the Workhouses shall in certain instances, receive and keep the lunatics within their walls. We call this a clumsy compromise, for the Workhouses are both Lunatic Asylums and are not Lunatic Asylums, since on the one hand the Lunacy Commissioners and the Poor-law Board sanction the admission and retention of lunatics in some of the Workhouses, whereas, on the other hand, it appears from legal opinions which have been given to the Poor-law Board and the Lunacy Commissioners, that the local Guardians have no authority to detain a pauper of unsound mind against his wish to be discharged, *unless the insane person is dangerous to himself or others*, and the *onus probandi* would be thrown on the Board of Guardians in case any insane pauper, or alleged insane pauper, were to bring an action against them for illegal detention.

We are aware that Mr. HARDY'S new Poor-law scheme contemplates the erection of district Asylums for the insane paupers of the metropolis, and if this part of the plan should be carried out, many of the evils to which we have alluded will be obviated, for in fact the Middlesex Asylums of Hanwell and Colney Hatch would then be immediately relieved of many of the applications which would otherwise be made for admission. But the question still remains whether it is necessary that all the insane paupers, of every class, should be received into gigantic and costly buildings and there kept for life at great expense to the nation. An opinion has lately been gaining ground that many of the harmless lunatics, of whom there is a very great number, might be with perfect safety kept in detached houses scattered through the country, and maintained at about the same rate as ordinary paupers, and this opinion, indeed, is entertained and acted upon by the Scotch Lunacy Commissioners. Between the views of the latter who approve and sanction the retention of lunatics in private dwellings, and those of the English Lunacy Commissioners who wish to drive them all, whether private or pauper, into gigantic and overgrown asylums, perhaps a middle course might be found, for it cannot be denied that the present condition of insane paupers in England, although in theory very defensible, is creating very much discontent and acts with great inequality. The great Asylums are becoming mere refuges for the hopeless class of imbecile and harmless lunatics, while the curable and violent cases are too often left in the Workhouses where the appliances for treatment are inefficient, and where the Guardians are without legal power.

THE OBSTETRICAL SOCIETY OF LONDON AND MR. BAKER BROWN'S OPERATION.

IT is only a few weeks since we had occasion to comment on a debate which occurred at a meeting of the Obstetrical Society, and which—replete with personalities—seriously detracted, in our opinion, from the dignity of the Society. We have now to recur to the subject in connexion with an *embroglio* which came off on Wednesday evening last, beside which the previous discussion was tame and spiritless. The Council of the Society had, it appears, decided to exercise the provisions for expulsion of a Fellow on account of "the published matters in relation to the performance of clitoridectomy." Who the Fellow was and the *modus operandi* will be learned from the following correspondence circulated by Mr. BAKER BROWN:—

"136, Harley-street, Cavendish-square, W., March 1st, 1867.

"SIR,—On Wednesday evening last I received the following note. I will now merely observe that I have had no opportunity of hearing what specific charges are made against me. I have never, therefore, had an opportunity of meeting them. I am simply informed that notice of expulsion will be read on Wednesday next by the Presi-

dent. I will, therefore, only say that what is my case to-day may be your case to-morrow, and ask you to suspend your judgment until placed in possession of the charges and my reply thereto. "Yours truly,

"I. B. BROWN."

"53, Berners-street, Feb. 27th, 1867.

"SIR,—We are directed by the Council of the Obstetrical Society to forward to you a copy of the following resolution, passed at special meetings of the Council held on the 15th and 25th inst., for the purpose of considering two letters addressed to the President and Council by Mr. I. Baker Brown :—

"'That, in the opinion of this Council, the published matters in relation to the performance of clitoridectomy by Mr. I. Baker Brown, justify the Council in recommending the Society to put in force against him Law IV., Section II., which provides for the expulsion of a Fellow.'

"We are, sir, your obedient servants,

"G. C. P. MURRAY, M.D.,
"HENRY GERVIS, M.D., } Hon. Secs.

"To I. Baker Brown, Esq."

"'CHAPTER IV.

"'*Of the withdrawing and removal of Fellows.*—1. A Fellow may withdraw from the Society on paying any contributions that may be due from him, and signifying his intention in writing to the President.

"'2. Whenever there shall, in the opinion of the Council, apppear cause for the removal of a Fellow, the same shall be notified by the President of the Society at the next ordinary meeting, and a notice forthwith sent to every Fellow of the Society, making the next meeting special, for the purpose of considering such removal. If, on a ballot taking place, two-thirds of the Fellows present shall vote for the removal, the President shall declare the Fellow in question removed accordingly. At such ballot, fifteen Fellows, at the least, must be present."

We will not, we trust, be open to the suspicion of favouring a particular operation, or of coquetting with any illegitimate practice of our profession, in animadverting on the very unusual course pursued to Mr. BAKER BROWN in this matter. The affirmation or condemnation of an operation lies with the judgment of the profession, not with us. The action of the Council of the Obstetrical Society, however, is altogether outside the merits or demerits of clitoridectomy—its use or abuse; and in the resolution to expel Mr. BROWN is opened to us a great ethical question of the deepest professional interest, and which must not be blinked by any fear of defilement in its discussion.

We find it impossible to give in full the report of the wrangle between Councillors and Members. It is sufficient to say that the President, in accordance with the bye-law, notified to the Society the recommendation of the Council that Mr. BROWN be expelled as a preliminary to the general ballot *pro* or *con* at the next meeting. It would naturally be presumed that, in asking the Society to outlaw one of its Fellows—to place on him such a brand that he could hardly expect to be met in consultation as a gentleman and a man of honour, the Council would be prepared to produce condemnatory evidence of sufficient gravity to justify it in this step; but it appears that the Council has no more specific indictment to lay than "the published matters," and they ask the Society to content itself with this very vague inuendo for a whole month, till the next meeting in April. This is a course neither just, temperate, nor dignified; neither fair to the accused nor convincing to the profession. The Council have, intentionally or not, acted on the military principle—more wholesome at war than in medicine—to hang the culprit first and try him afterwards. Do they think that the red blot which they have placed so rashly against Mr. BROWN'S name can ever be erased by any vindication, however triumphant? and how is it that it did not occur to them to hear Mr. BROWN'S defence, and place it with the charges which it is intended to meet before the profession, before ostracising him.

The debate eventuated in an assurance from the Council that the "causes of the removal" would be placed in the hands of the Fellows within ten days or a fortnight. So far so good; but is Mr. BROWN to have an opportunity of defending himself? If he has not, we venture to say that the verdict of the Society will be as worthless as that of the Council, and if condemnation be deserved it will fall impotently. When we see on the Council men who have publicly committed themselves to a course of hostility to the accused, we see a danger lest our profession should be brought into contempt by the installation of a modern secret inquisition in our ranks. Whatever be the consequence, the profession will not sanction persecution in any form. It must never be possible to say that professional jealousy or personal pique has been allowed to drag through the mire the honour and reputation of any brother, yet these remarks need to be repeated, because already fair play has scarcely been given. Thus in every trial it is the custom of journalists to refrain from comments prejudicial to a prisoner pending the verdict, nevertheless we regret to find, however, that some of our contemporaries have already been writing with an evident bias against Mr. BROWN. This is certainly a step too far. Mr. BROWN is accused—the Council are his accusers—the Society is the jury; we demand that the accused who is now on his trial, not before a star chamber tribunal, but before the whole profession, shall be permitted to justify himself if he can; and we earnestly trust that no Fellow will weaken the strength of his acquittal or condemnation by a prejudiced or uninstructed vote.

Notes on Current Topics.

OBSCENE PAMPHLETS.—We have several times lately alluded to the abominable productions of the tribe of filthy quacks that are thrust into the hands of young men passing along the streets, and invoked the strong arm of the law to put down the nuisance. It is a matter of regret that Parliament has not yet seen fit to take action in this

matter. If the existing law be insufficient to protect our youths from this onslaught, it is time that an act were passed for the purpose. The instances of this evil brought to our notice cannot all be described in our columns, and if they could, we greatly fear it would not tend to abate the nuisance. The impunity with which at present this nefarious trade has flourished, lead these heartless scoundrels to spread their nets wider and wider. Not only our large towns, but even villages and country districts are becoming invaded by these destroyers. An infamous little pamphlet has been sent to us by an esteemed correspondent from Scotland, who very pertinently asks whether the Glasgow University Council should not be communicated with. That the matter concerns the honour of the University seems clear from the following passage of our correspondent's letter :—

"The enclosed filthy little publication is sown broadcast through our country towns by a seedy looking gentleman, who adopts the cowardly plan of slipping it beneath the door, or throwing it into the lobby. The author is, as he says himself, a Graduate of Glasgow University, and *placed on the Register*. What are the benefits of Medical Registration when such doings are allowed on the part of those who are on the Registration Roll. Until a Medical enactment is equal to crushing such filthy emanations, we must pronounce Registration a mockery and a delusion."

A Medical View of the Reform Bill.—It has no doubt appeared strange to not a few in our profession that a Government which professed such a desire to avoid the "swamping" of the educated classes by too free an extension of electoral privileges, and to prevent that, has devised a number of "fancy franchises," should evince such an insensibility to the claims of medical men for representation. The church and the law have immense influence in both houses of Parliament, but medicine is powerless to protect its own interests or advance those of the Commonwealth. The disdainful manner in which the Chancellor of the Exchequer rejected the advocates of the Scotch Universities is a curious comment on the abundant professions of the government. Had he been sure that these venerable institutions would be true to his party, we suspect he would have been very eloquent on the claims of education. He offers one member to the University of London, a sort of sop to the truly liberal professions, which we declare utterly insufficient. Had he offered each of the Scotch Universities a member, and another to the Queen's University in Ireland, it would at least have been a proof of the sincerity of his desire to increase the influence of education. It is strictly in accordance with the constitution to give members to the Universities, and with those of Oxford, Cambridge, and Dublin returning two each, the offer of one to the London is but a niggardly recognition of intellect—a proof that with all Mr. Disraeli's enthusiasm for educational and fancy franchises, learning has little to hope for at his hands.

Casuals at Clerkenwell.—Another investigation into the management of the Clerkenwell casual wards has produced more astounding revelations than those on which we commented a few weeks since. The inqury has ended in the superintendent and his wife being called upon to resign. This proposal having been substituted for the more energetic one of a resolution to dismiss them. The revelations are really so shocking that it is not surprising the guardians should apparently wish it to be understood that some of the most cruel and abominable practices have already been discontinued. Little comment is needed on the facts that turned up during the inquiry. The case was brought forward by Mr. Bassinger, a parishioner of Clerkenwell, who stated that on passing the wards one wet evening, about nine o'clock, he saw a woman outside, to whom the superintendent, Runciman by name, was refusing admission. Mr. Bassinger and other persons applied to the superintendent to admit the woman, but Runciman told them to go away, accompanying his demand by the assertion that they were costermongers and criminals, acting, so the witness described, in a filthy manner towards Mr. Bassinger's son. Mr. Dalton, a person residing in the neighbourhood, said he was in the habit of passing by these wards, and had often seen persons refused relief, and had seen disturbances there. The woman, he said, was not intoxicated, and he felt very indignant to think that a woman should be kept out on the wet stones. Mrs. Gibbs, a resident in Clerkenwell-close, near the casual wards, also deposed to hearing the bad language used by Runciman. She deposed to Runciman's violent and insulting behaviour towards herself on more than one occasion, and then stated that the casuals had to pass naked through an open yard in the rear, where they could be seen by the neighbours, declaring that she had been obliged to move in consequence, as she had a growing family. Runciman denied using bad language, and called the porter and a policeman as witnesses, but the guardians seemed to place no reliance on the testimony they offered, and adopted the resolution we have named.

The Cholera in Jersey.—The medical authorities have been strangely at odds with regard to the real nature of the disease which has appeared in that island, some without hesitation pronouncing it cholera, others as decidedly declaring that it is not, though doubtful as to its true character. Possibly the reports which were circulated there, and which have reached us, may have occasioned more alarm than need have been, inducing many hastily to leave the island and preventing others from going there, which has interfered with its welfare in many points of view. Be this as it may, the epidemic has spread widely and rapidly in one or two localities, and has been followed by considerable mortality. Up to the 28th of last month the total number of cases reported was 130, of which 53 had died, 59 were restored to health, and 18 were still under medical care ; but as decided sanitary measures have been adopted, the cases were gradually becoming fewer, and on the day above mentioned no deaths were reported, so that there is every reason to hope that before long the epidemic will entirely disappear.

Scurvy Statistics.—This subject was referred to in our pages a few weeks ago, and our attention is drawn to it again by a fresh importation of this disease into the country in British ships. By inquiry it was found that 20 cases were brought by two of those vessels, and no less than 42 by five others, making 62 during the past two months of the present year. Of these, 30 were received at the *Dreadnought* Hospital. The Board of Trade made investigations with regard to four of these vessels. As yet little has transpired ; but it was found, at an inquest held at Greenwich, from the evidence of Dr. Dickson, R.A., one of the inspectors, that on board one of these vessels, instead of lime-juice, a dilution of citric acid was made use of. Both Dr. Dickson and Mr. H. Leach declared this to be useless as an anti-scorbutic agent.

Summary of Science.

(Specially Edited and Compiled for the Medical Press and Circular.)

By CHARLES R. C. TICHBORNE, F.C.S.L., F.R.G.S.I., &c.

[The Editor of this Summary wishes it to be understood that he is not responsible for the ideas, theories, or the correctness of statements made in any of the papers quoted in the compilation.]

ON THE ELIMINATION OF NITROGEN BY THE KIDNEYS AND INTESTINES DURING REST AND EXERCISE.

By Dr. PARKES.

Some time since we referred to Professors Fich and Wislicenus' experiments, and Dr. Parkes' experiments were undertaken to test the results arrived at by those professors with respect to the elimination of nitrogen, during exercise, on a non-nitrogenous diet, as recorded by them in the *Philosophical Magazine* of June. Dr. Parkes' paper appears in the proceedings of the Royal Society, No. 89, Vol. xi. The last named gentleman experimented upon two intelligent and healthy soldiers belonging to the Army Hospital Corps. He remarks that the satisfactory results of his experiments were owing essentially to the very great care with which these two men carried out every rule which is laid down, and remarks that when soldiers are steady and trustworthy they are very good subjects for experiments of this kind. Dr. Parkes is, no doubt, right to a certain extent; but such experiments must, in this respect, be inferior to those executed by the professors on themselves. The author divides his experiments into five periods—viz.: 1st. The men were kept under observation for six days, in order to determine the varieties in weight, and in the excreta; and to see if the metamorphosis of tissue appeared healthy. 2ndly. The men were placed for two days on a non-nitrogenous diet, consisting of arrow-root, sugar, and butter, from which the casein had been separated; the only nitrogenous substance was tea. 3rdly. The men returned to their former regulated diet for four days. At the end of these four days the weight of the body in each man had returned almost exactly to its former amount. 4thly. The diet was the same kind as in the second period (non-nitrogenous), but with exercise for two days. 5thly. Period was for four days, when they were again placed upon their ordinary diet with exercise. The men were not stinted in the amount of food they eat, but the quantity was carefully noted. We cannot give Dr. Parke's tables, suffice it to say, that each day the nitrogen and intestinal excreta, urea, chloride of sodium, and phosphoric acid, were determined each day, and that he comes to the conclusion that they are not altogether in accordance with Professors Fich and Wislicenus' experiments.

The decrease in the urea during the first thirty-six hours of the exercise-period, as compared with the rest-period on a diet without nitrogen, which occurred in these two men, is, says Dr. Parkes, conformable with the results obtained by the two experimenters mentioned, but this is not the case with the increase in the urea which was found in the last twelve hours.

Yet that this increase is real is shown by the accordant results in the two men, and by the increase of the total nitrogen of the exercise-period, as determined by soda-lime.

The author then proceeds:—

"The relative greater increase in my experiments of the non-ureal nitrogen, which makes me believe that an excess of nitrogenous compounds other than urea, and possibly creatinine especially, was produced by the exercise, is not perceptible in their experiments; yet, I cannot but believe that the fact was so, as it comes out with great clearness in the two men. Relation of ureal to non-ureal nitrogen, the former being taken as a unity:—

	S.	T.
Before rest-period ...	1 to 11	1 to 1,108
Rest-period	1 to 1,042	1 to 1,13
After rest-period ...	1 to 1,009	1 to 1,116
Work-period	1 to 1,126	1 to 1,178
After-work-period ...	1 to 1, 08	1 to 1,06

(three days.)

"The reason which makes me believe the results are real, is the fact that the individual relation of the ureal and non-ureal nitrogen is preserved; that is to say, in T the non-ureal nitrogen is, under normal circumstances, a little in excess as compared with S. The same relative excess is also found in the work-period. The reason of these differences between Professors Fick and Wislicenus, and myself, is probably to be found in the short period of time during which their observations were carried on; and also, because the urea was not determined by them on the night of the 30th to 31st of August.

"But their conclusion is certainly borne out, that on a non-nitrogenous diet exercise produces no notable increase in the nitrogene of the urine, although when the whole period is considered it does produce a slight increase.

"It may now also be said that under similar conditions exercise produces no increase in the excretion of nitrogen by the bowels."

The diminution in the amount of urea during the actua period of work, as compared with the rest-period, which, if I am not mistaken, is obvious in both our experiments, is a very curious circumstance. It shows, not that on a non-nitrogenous diet, the nerves and muscles are totally unaffected by exercise, but that changes go on which either retain nitrogen in the body or eliminate it by another channel.

It is possible that when the excess of nitrogen is restricted the exhausted muscle will take nitrogen from the products given off from another portion of decomposing muscle, and thus the nitrogen may be used over and over again; or, after all, is nitrogen really given off in some form by the skin during exercise as formerly supposed?

Although it is certain that very severe exercise can be performed on non-nitrogenous diet for a short time it does not follow that nitrogen is unnecessary. The largest experience shows not only that nitrogen must be supplied if work is to be done, but that the amount must augment with the work. But, for a short period, the well-fed body possesses sufficient nitrogen to permit muscular exertion to go on for some time without fresh supply. "But the destruction of nitrogenous tissues in these two men is shown by the way in which, when nitrogen was again supplied, a large amount was retained in the body to compensate for the previous deprivation. I believe also that in these two men the great exhaustion of the second day showed that their muscles and nerves were becoming structurally impaired, and that, if the experiments had been continued, there would have been on the third day a large diminution in the amount of work. I have found that the period when a restricted supply of nitrogen begins to tell on the work differs in different men. In one experiment I reduced the nitrogen in the food to one-half its normal quantity in two men. In one no effect was produced in exercise in seven days, in the other a lessening of active bodily work was produced in five days. Doubtless the previous nutrition of the muscle would influence the time."

Finally, it may be questioned whether the relation of elimination of nitrogen to exercise can be properly determined in this matter—*i.e.*, by cutting off the supply of nitrogen.

The true method would probably be to supply nitrogen in certain definite amount, so that the acting muscle might appropriate at once what it required.

ON THE SEPARATION OF THE SALTS OF STRYCHNINE BY PHENIC ACID.

M. P. Bert says that on agitating a weak solution of hydrochlorate of strychnine with a few drops of phenic acid the solution takes the appearance of an emulsion. It then is found to be nearly inactive when administered by the *hypodermic* method; but this inactivity is simply due to slowness of absorption, and not to any chemical change in the composition of the alkaloid. On adding ether, a bright solution is produced, which is as active as ever.

ARSENIURETTED AND ANTIMONIURETTED HYDROGEN.

M. Drugendorff discriminates between those two bodies by passing them over fragments of white caustic potash. The antimony leaves a brilliant metallic coating upon the potash. The arsenical compound produces no change.

ON THE PREPARATION OF MEDICAL TINCTURES.

On speaking of the relative merits of percolation and maceration, M. Filhol *(Journal de Pharmacie et Chimie)* says, that stronger tinctures can be made by percolation, but that by the latter process they keep better and are less liable to become turbid. He is of opinion that alcohol is not as good a preservative as it is generally supposed, and that certain immediate principles of vegetable origin alter when dissolved in alcohol. A tincture beautifully green, from the presence of chlorphyl, will undergo transformations on treating with hydrochloric

acid, which M. Fremy has described. These changes do not take place in a tincture which has been kept some time. The petals of the ranunculus macerated in alcohol gives a golden yellow tincture, which, on the addition of hydrochloric acid, turns green. After the liquor has been filtered a yellow substance remains on the filter, and a fine blue liquor passes through. Nothing of the kind takes place when the tincture has been kept some time. The solutions remain yellow. Good tinctures can be prepared from leaves and flowers well dried. It is therefore better to preserve the plants than the tinctures, and the latter should be prepared in small quantities and used as fre h as possible.

ON THE ESTIMATION OF ORGANIC MATTER IN WATER.

M. F. Bellamy, in a communication in the *Journal de Pharmacie et de Chimie*, January, refers to what is pretty generally known amongst practical chemsts—viz., that the determination of organic matter in drinking water by permanganate of potash is dependent upon the nature of the organic matter present. He proposes to estimate the organic matter by burning it with oxide of copper in a glass tube, and passing the evolved gases through a solution of baryta, and the carbonate of baryta estimated by a volumetric solution of nitric acid. We do not exactly see why the author should fix upon the carbon for the approximate determination of organic matter. The determination of the nitrogen would, in our opinion, be a more important point in the examination of potable waters.

ON THE BONES OF BIRDS AT DIFFERENT PERIODS OF THEIR GROWTH.

Experiments are given by Dr. J. Darcy (Proceedings of the Royal Society) as having been made with the following birds:—Common fowl—duck, goose, turkey, pheasant, partridge, grouse, rook, common crow, owl, sparrowhawk, buzzard, blue-tit. From these results the following conclusions may be drawn:—First. That at an early stage, and up to a certain period of growth, marrow exists in the bones specified of all the birds named, and that about the time of hatching the medullary tissue abounds less in oil or fatty matter than at a later period, the proportion varying in different instances; least, probably, in birds of prey, such as the buzzard and owl, most in birds the food of which is mostly vegetable, such as the goose. Secondly. That the substitution of air for marrow in those bones which are essentially hollow varies as to time in different species—is earlier in the rook, the crow, the grouse, the tit than in the common fowl, the duck and goose, especially the latter. The exchange of one for the other having probably some relation to the time of taking wing and the use of the parts, and in accordance the humeri, except in the instance of the sparrowhawk, seemed to have the marrow absorbed somewhat earlier than the femora. It may be conjectured that, like the residual yolk in the young bird, the marrow in the bones in question may serve in part as food, nourishing in the act of its removal. As regards the quality of marrow in the bones of different birds, the trials Dr. Davy has made have been very limited. He is disposed to infer from them that, besides differing as in many instances it does in colour, it may differ also in composition, in the proportion of adipose matter and its kind, and in the proportion of albuminous matter; in some, as in the bones of the goose, oil most abounding; in others, as in those of the rook and buzzard, albuminous matter and fat of the stearine kind. Even in the bones of birds of the second kind—viz., the woodcock, blackbird, water-ouzel, martin-swift, sparrow, greenfinch, titlark, stonecleat, blackcap, canary, yellow ammer, little sandpipe—such as their long bones, their is a difference in this respect. Of these, all that the author has examined sink in water with the exception of the femora, which only partially sink, the marrow in them being less rich in adipose matter and consequently in drying contracting more, and as before remarked admitting more air. As to the marked difference of birds of the two kinds in relation to the condition of their bones, the rationale is not obvious. Perhaps an approximation to the truth, or to the probable, may be made by comparing the bones of birds of the two kinds which are possessed of similar powers. The swift, for instance, and the buzzard, rivals in swiftness of flight and enduring power of wing. How different are their humeri! says Dr. Davy. The former very strong, short, and compact, provided with firm and large processes for the attachment of muscles; in the latter long, hollow, and light, and comparatively brittle, yet sufficiently firm to bear without fracture the muscles which act on them. Here have we not, after a manner, a kind of substitution of qualities? Great strength and extended surface in small space in the one, for lightness with greater length of leverage in the other. Further, the one kind of bone, that which contains marrow being less brittle than that which contains air, and more yielding, may be less liable to fracture—a quality which in the bird, before ossification is complete, may be of essential service; it may perhaps serve to account for the bones which are eventually hollow having primarily marrow in place of air.

SOLUBLE GLASS FOR BANDAGES.

M. Velpeair proposes to use soluble glass in place of starch, plaster of Paris, &c., now used for bandaging fractures. It is said to form a firm support, and becomes quite hard in two or three hours, yet it is readily removed by moisture.

MORPHIA AND STRYCHNINE.

M. Rodgers says that the reaction between strychnine and bichromate of potash may be mashed by morphia; but these two bases may be separated either by chloroform or benzole, which dissolves the strychnine, but not all the morphia.—*Chemical News.*

SILISIC ACID.

M. Frémy states to the members of the Academy of Sciences that silisic acid exists in two isomeric states. The first of them he calls metasilic acid; its equivalent is $(Si\ O_3)_3$. It is triatomic, and forms, with bases, three series of salts:—

$(Si\ O_3)_3$ MO, 2HO.
$(Si\ O_3)_3$ 2MO, HO.
$(Si\ O_3)_3$ 3MO.

The second isomeric state $Si\ O_3$ is what constitutes quartz. This also forms three series of salts being triatomic, but has not the same equivalent.

Proceedings of Societies.

MEETING OF THE HARVEIAN SOCIETY,

21st Feb., 1867.

Dr. Pollock in the Chair.

Mr. De Meric read a paper on

SOME COMPLICATIONS OF GONORRHŒA.

The author offered a brief sketch of the common complaint called gonorrhœa, and stated that some urethral discharges were independent of contagion, very simple, easily controlled, and, in general, free from complication; whilst others were just the reverse. The first kind of discharge might conveniently be called urethritis, the second true gonorrhœa. On two complications of the latter—namely, gonorrhœal rheumatism and gonorrhœal ophthalmia, he wished to present a few remarks. He related with full details, the case of a gentleman lately under his care, where both complications had occurred. The facts of this case led to the inquiry whether the joint complication was really dependent on the urethral discharge, or whether it was a mere coincidence. The author believed in this dependence, and for the following reasons:—1. Because there was a pathological sympathy, independently of gonorrhœa, between the inflamed urethra and the joints. 2. Because the articular affections had, by many observers, been noticed to exist along with the urethral discharges. 3. Because in certain subjects joints had been known to suffer at each new attack of gonorrhœa. Those, on the other hand, who considered the so-called gonorrhœal rheumatism as a mere coincidence, alleged that the joint complaint was observed but rarely, compared with the enormous number of cases of gonorrhœa. This the author not only conceded, but corroborated, by saying that he could, from his own practice, cite but three cases in hospital patients, and seven treated in private. The common cases of rheumatism, therefore, had nothing to do with the joint complication in patients suffering from gonorrhœa; and we were driven to believe that something peculiarly predisposing must exist in the individual, which, added to the existence of the gonorrhœa, gave rise to the inflammation of the synovial membrane of the joint, or the ocular conjunctiva. Nor should it pass unnoticed that the discharge must be bona-fide urethral to generate the complication, as discharges from the glans, prepuce, vagina, vulva, or uterus were never connected with rheumatism. Hence the rarity of the complications among women. He had, however, observed one case of this kind. The author

now referred to the joints usually affected, and stated that out of ten cases, six suffered in one or both knees, one in the hip, one in the articulation of the jaw, one in the ankle, and the tenth in several joints at the same time. Mr. DeMeric then entered into some details respecting these cases, and said that he had not met with any where the tendinous sheaths, bursæ mucosæ, muscles, or nerves had been affected, or else they had been overlooked, which might easily occur. Turning to therapeuties, Mr. DeMeric, referring to the treatment he had adopted in his cases, which treatment had been very active, deprecated the fashion, now much in favour, of doing nothing; the cry being to cure, or attempt to cure various affections, *without* the remedies hitherto in use. This applied still more forcibly to the eyes. In such cases we had either to treat rheumatic ophthalmia, mostly connected with the joint affection, or the destructive conjunctival inflammation depending on actual contact with gonorrhœal pus. In both, especially in the latter, most active measures were required. The author had treated the two former successfully, but the cases had been very few, three of the former, and one only of the latter. He was confident that both the joint and eye complication, which had formed the subject of the paper, deserved much attention, and should be combated with the means which nature had placed in our hands.

Dr. Drysdale had seen several cases of what he was disposed to consider rheumatism dependent on gonorrhœal discharges. A case in a female, with urethral discharge had been shown him by Dr. Alfred Fournier, in the Hôtel Dieu in Paris, in October last, where the wrist joint was affected, and the fingers stiffened, and painful. Such cases were very obstinate, and although certainly rare, they appeared to him somehow connected with gonorrhœa.

Dr. Tilbury Fox suggested that the class of cases spoken of by Dr. De Meric might be examples of reflex action, and this would be corroborated if, as was stated by him, the disease usually affected the knee-joint, which would naturally suffer most when the urethra was irritated and inflamed, on that theory.

Mr. Adams said that Mr. Skey had once made the remark, that instead of this disease being called gonorrhœal rheumatism, it might with more propriety be called rheumatic gonorrhœa. Such affections of the joints, in his experience, were usually amenable to treatment and the prognosis was good in such cases. The true rheumatic affection of joints was, in his experience, never associated with the presence of pus in the joints.

Mr. Baker Brown, jun., said that he thought it must be indeed a difficult task to connect rheumatism of the joints in women with urethral or vaginal discharge, so universal were vaginal discharges in that sex.

Mr. Weeden Cooke said he was not ready to admit the specific character of the inflammation spoken of by Mr. De Meric. He thought it was only a coincidence, not a sequence, that was met with. Probably the derangement of the digestive organs by the needless exhibition of cubebs, &c., might often cause rheumatic disturbance. He objected then to the term gonorrhœal rheumatism.

Mr. Power mentioned that he saw in the course of a year at least seventy cases of congenital purulent ophthalmia. He had made it his business to inquire in such cases what sort of a discharge the mothers were suffering from, and he was not able to say that in many cases there had been symptoms of gonorrhœa in the mothers. The best treatment for purulent ophthalmia was extreme attention to cleanliness, the eyes to be cleaned out every half hour, and a lotion of gr. ½ of arg. nit. ad ℥i. to be dropped into the eye frequently. Aconite was useful in rheumatic affections of the eye.

Mr. Teevan exemplified the use of the urethroscope by an examination of two patients, the subjects of gleet. He pointed out the appearance of the inflamed portion of the urethra, and enlarged upon the advantages afforded by this instrument in the treatment of chronic urethritis.

It was moved, seconded, and carried unanimously, that a committee be formed for the purpose of investigating the best means of preventing venereal disease, and reporting thereon to the International Congress at Paris this year.

CITY AND COUNTY OF CORK MEDICAL PROTECTIVE ASSOCIATION.

The annual meeting of the members of this association was held in the lecture theatre of the Royal Cork Institution on the 5th of March.

Dr. Harvey presided.

Amongst the other medical gentlemen present were:—E. R. Townsend, E. R. Townsend, jun.; W. Beamish; Johnson, Midleton; Johnson, Military Prison; S. Hobart, N. J. Hobart, G. J. Wycherley, D. C. O'Connor, T. S. Shinkwin, J. F. M'Evers, W. T. Budds, S. O'Sullivan, R. Callaghan, Warren, Tuckey, Bantry; Moore, Looney, White, Resident Physician Cork Fever Hospital; T. Morrogh, Kelly Spike Island; C. Armstrong, Holmes, P. Golding, W. C. Townsend, &c.

In opening the proceedings,

The Chairman said that it was not necessary for him to detain them by any lengthened observations. They were all aware of the character of their meetings; and he expected the character of that meeting would be in unison with them. The tenor of their business was not of a selfish or narrow nature at any time. Their anxiety was through the elevation of their profession to render service to the community at large by seeking, as far as they could, to improve the education of the medical man, and to improve his station and position in society, and thus render him a more efficient member of society than he otherwise would be, and better calculated for improving the military, naval, or other service in which he might be engaged.

The Secretary (Dr. Armstrong) then read the report, which is as follows:—

"Your committee's first meeting for the year just closed was held on the 7th of last April, when documents were read from Dr. J. S. Lee, hon. sec. of the Leeds Medical Registration Society on the subject of vaccination, but they arrived too late for action being taken on them. The melancholy death of Dr. Joseph Mackesy, of Waterford, having been alluded to, it was unanimously agreed that a resolution from this meeting be immediately sent to his father on the subject. Resolution—'That we have heard with sincere regret of the unexpected death of Dr. Joseph Mackesy, of Waterford, and we would beg to offer to his respected father, our valued and long friend, the assurance of our heartfelt sympathy in his heavy affliction.' Dr. Mackesy replied by sending his card, marked by deep mourning, on which was written—'To express deep obligation and sincere thanks to the president and members of the County and City of Cork Medical Protective Association for their resolution of sympathy.' On the 5th of May letters were read from Dr. Edgar, of Fermoy, Dr. Sandiford, of Castlemartyr, Dr. Madras, of Coachford, and Dr. Manly, West Bromwich, Staffordshire. Dr. Edgar says—'I enclose my subscription and that of Dr. Blackquier for the current year, and assure you that the rules and exertions of the association meet my strongest approval.' Dr. Sandiford writes—'In enclosing my subscription, allow me to say how deeply I feel the benefits which the Association confers on the Profession, and as a dispensary medical officer, I am grateful for its exertions on our behalf.' Dr. Madras alluded to the attempts being made to render the dispensary medical officers in some localities assistant-relieving officers, and asked for the copy of a letter addressed to the dispensary medical officers of Cork by the Poor-law Commissioners on the subject. Instructions were given that he be supplied with a copy of the letter. Dr. Manly writes—'Will you kindly send me a copy of the last report of the Cork Medical Protective Association. I am secretary to our local society, and though we have done little hitherto, I am anxious to interest the members in matters not purely professional, but ethical and political.' The copy of the report was forwarded to Dr. Manly. A special meeting of the Association at large was held on the 12th of May, at the instance of the President, who, in opening the proceedings, observed that the necessity for calling this meeting suggested itself to his mind on reading an article in a late number of the *Lancet*, on the constitution and powers of the Medical Reform Council of Canada, and the contrast its powers formed with the Medical Reform Council of this country, as well as from an announcement made in another number of the *Lancet*, that Sir George Grey would allow and assist Dr. Burrowes, President of the Medical Council, to bring in a bill this session, and arm the council with powers to accomplish what was so long and anxiously sought for—medical reform. The Chairman entered minutely into the subject, and maintained the idea that a sound preliminary and professional education was the grand bulwark against the schemes of quacks and impostors, by securing for the community and profession well educated men, and said that he brought this subject especially before the entire Association in order to ascertain if the Association deemed the occasion worthy of immediate action, and, if so, what that action should be. After much conversation, the Chairman

read a copy of a petition to Parliament, and of a memorial to Sir George Gray, whereupon it was resolved—that the petition and memorial be engrossed and printed, and that copies of the petition be sent to all the Associations in Ireland, and to at least one medical man in every Union, with a request that similar petitions be sent forward from the Associations and Unions. It was further arranged that influence be brought to bear on the Irish Parliamentary representatives to support the prayer of the petition. At the meeting of your Committee (a special one), held May 17th, two letters, dated 13th and 14th of May, were read from Dr. Johnston, and universal admiration expressed at the sensible, and practical observations contained in them, and a resolution passed unanimously—that this meeting fully entertains the sound views of Dr. Johnston, as recorded in his letters, and that, therefore, instead of petitioning Parliament, we first memorial the Medical Reform Council, and urge the necessity of their seeking powers to accomplish medical reform.

"*To the President and Members of the General Medical Council of The United Kingdom. The Memorial of the County and City of Cork Medical Protective Association,*

"Respectfully Showeth:—That your Memorialists look forward with deep interest to the measure which they understand is likely soon to be introduced into Parliament to amend the 'Medical Act' of 1858. That this Act must be looked upon as having, up to the present, fallen short of what was expected from it, in its two principle objects, viz.:—The protection of the public, and a really improved system of medical education. That with respect to the first of these objects, it appears to your memorialists that registration must continue to be all but nugatory, unless the knew legislation render it imperative on the Council to order, through duly authorized officers, the prosecution of all persons incurring the penalty specified in clause xl. of the Medical Act; or that which may be substituted for it. That the vastly more important object of securing a sound and adequate education for all candidates for medical and surgical qualifications, is not, in the apprehension of your memorialists, likely to be attained whilst the powers of the Council continue to be limited, as they are at present. To be enabled efficiently to provide for the country a body of properly qualified practitioners, it appears to memorialists that the Council should be empowered to prescribe and enforce such educational regulations as may be found requisite for the attainment of that important object. That no education, memorialists respectfully submit, can be considered sound and adequate, which does not include as preliminary to entering on medical studies, properly so called, such a course both literary and scientific, as will enable the student effectively to master the varied subjects of professional study with which he will have to grapple, and afterwards, to take such a position amongst men of general information, as will be calculated to maintain for medical science the estimation in which it is desirable, for the good of mankind it should be held. That the course for a degree in Arts in the different Universities should, in the opinion of your memorialists, be preliminary to that for a degree in Medicine, and that a course of education, embodying both classical studies and the various branches of physical science, should be indispensable before entrance on medical and surgical education of whatsoever character. Wherefore, your memorialists would respectfully suggest the expediency of the Council seeking for such a modification of clause xli. of the Medical Act, as will secure the prosecution of offenders against its provisions. But especially of seeking for the power to establish a uniform curriculum of studies, preliminary and professional, which shall be binding on all the educational bodies of the country.—And your Memorialists, &c."

Copies of the memorial were sent to Dr. Burrowes, Dr. Mackesy, Dr. Quinan, Dr. Aquilla Smith, Mr. Hargrave, Dr. Stokes, Sir D. Corrigan, Dr. Apjohn, and the editors of the *Lancet*, *Medical Times*, and *British Medical Journal*. Dr. Burrowes replies thus:—

"General Council of Medical Education Registration of the Kingdom,

"Soho-square, London, W., 2nd June, 1866.

"Sir—I am desired by the President of the General Medical Council to acknowledge the receipt of your letter of the 31st ult., and to inform you that the memorial of the County and City of Cork Medical Protective Association transmitted by you reached him, but not until Monday the 22nd ult., when the Council had already been sitting four days, and had a large amount of business already before it, so that the memorial could not, in justice to other communications, take precedence of them. The memorial was duly submitted to the Council on the 29th ult., and ordered to be entered on its minutes for that day. The subject of it had already and for a considerable time engaged the consideration of the Council.—I am, sir, your obedient servant, Francis Hawkins, Regr.

"Charles Armstrong, Esq., M.D., hon. sec."

Mr. Hargrave says—

"London General Council of Medical Education and Registration of the United Kingdom,

"May 22, 1866.

"Dear Dr. Armstrong—I have received your memorial, and wish to inform you that we are giving particular attention to the important question of education. As to the preliminary arts' education, however, you may be disappointed as to the working of the bill. I must say that this Council have been giving every attention, and the failure does not show any neglect of it. If you have read the strictures on the Indian Civil Service examination just concluded, there is a melancholy statement of candidates' great deficiency in English language. You may depend on it I will pay every attention to your letter, the memorial, and its suggestions.—Yours sincerely, dear doctor, "William Hargrave."

A special meeting of your Committee was held on the 18th of June, in consequence of receiving the annexed requisition:—

"To the Secretary of the Cork Medical Protective Association.

"Sir,—We, the undersigned members of the Cork Medical Protective Association, beg you will convene a special meeting of the committee, at the earliest possible period, to take into consideration the recent occurrence at the Cork Union Workhouse." (Signed) "Thomas Gregg, M.D.
"E. R. Townsend, Jun., M.D.
"N. J. Hobart, M.D.
"D. C. O'Connor, M.D.
"James J. Curtis.

"June 15th, 1866."

A meeting was accordingly held, and numerously attended, and after much warm discussion, resolved by acclamation:—"That while we consider the members of our profession might confer great advantage on the public medical institutions by taking part in their general administration, we are nevertheless of opinion that any interference whatever of a professional nature by such members cannot fail to be productive of evil to the patients, and to bring discredit on the profession." It was further arranged that this resolution be published in the local papers, and The Medical Press and Circular. On the 4th of August a letter was read from Dr. Johnston:—

[copy].

"1, Park View Terrace, July 27.

"My Dear Dr. Armstrong,—I happened to be in court today, when the case of Foley *v.* Poole was tried, an instance, as you are no doubt aware, of a pauper patient endeavouring to obtain damages from the medical officer of the Ardmore Dispensary, for malpractices and neglect. This attempt, I am happy to say, was a complete failure, and verdict was given in favour of Dr. Poole, without a witness being called for the defence, Judge Fitzgerald stating that Dr. Poole left the court without the slightest stain on his professional character. I had no idea that the practice so prevalent, I regret to say, of late, in England, of endeavouring to extort money from practitioners in medicine and surgery for alleged malproxis and neglect, had extended to Ireland. This gross, and fortunately unsuccessful attempt has proved that we are liable to these unprincipled attacks here as well as elsewhere. I think this is a case for the Cork Medical Protective Association to take cognizance of, and that we should meet on an early day for the purpose of expressing our sympathy for Dr. Poole, under this unwarrantable attack on his professional character, and the members of the profession, not only in Cork, but throughout Ireland, should, by subscription, endeavour to compensate him for the pecuniary loss necessarily sustained in conducting his successful defence. It appears to me that this is one of these cases which eminently deserve the sympathy of every member of our profession. None of us know when our time for selection for these iniquitous persecutions—under the name of prosecutions—may occur, but, by uniting now in defence of our outraged confrère, we take the most effectual means of deterring unprincipled adventurers from initiating similar proceedings

against members of our profession. I shall be very happy to contribute a guinea to a fund for this purpose.—Believe me to remain, yours very sincerely, JOHN W. JOHNSTON."

"A meeting was shortly after held, at which strong expressions were used condemnatory of the action, and resolutions of a similar character, as well as one calling on the profession of Ireland to defray the expenses of the action, which were unanimously passed; circulars also were distributed. These resolutions were published in the Cork papers, *Waterford Mail*, and the THE MEDICAL PRESS AND CIRCULAR. The result proved successful, as evidenced by many satisfactory replies, several of which appeared in different numbers of the *Dublin Press and Circular*. On the 2nd of February, a special meeting was held, at which it was unanimously resolved—'That our Secretary be requested to convey to William P. O'Brien, Esq., Poor-law Inspector, our deep regret at the severance of his official connection with this district—a connection which, whilst it contributed in no small degree to promote the interests of the union, was also found not to be incompatible with the rights and privileges of the medical profession. That we earnestly hope, and believe, that Mr. William P. O'Brien's administrative talents, his intimate acquaintance with the details of the Poor-law Acts, and his uniform urbanity, will ere long secure for him an appropriate recognition in a higher sphere of official usefulness.—Signed, JOSHUA R. HARVEY, M.D., Chairman; CHARLES ARMSTRONG, M.D., Honorary Secretary.'—Reply—'Malahide, Dublin, 9th Feb., 1867. My dear Dr. Armstrong—Do me the favour to convey to your worthy President (Dr. Harvey) and the other members of the Cork Medical Protective Association, my grateful acknowledgment of the complimentary resolution unanimously adopted by them, in my regard, at their meeting of the 2nd instant, and the value of which has been greatly enhanced, in my estimation, by the terms in which it has been communicated to me by you. Few are in so favourable a situation to judge and appreciate the sacrifices and labours entailed on the members of your profession charged with the care of the sick poor in this country, as those occupying the position I have the honour to fill in the public service, &c.; none can testify more readily or warmly than I do to the great patience, devotion, and attention with which, as a general rule, they have acquitted themselves of their important and responsible trust. During my lengthened connection with the South, I enjoyed the privilege of an intimate and extensive acquaintance amongst the medical gentlemen practising both in the city and throughout the county of Cork; and now that an intercourse which, while it lasted, was a source of as much advantage as satisfaction to me, has been interrupted by my removal to a remote sphere of duty, it is peculiarly and deeply gratifying to me to receive the flattering assurances their resolution conveys, that I carry with me and will still retain the good wishes and esteem of a public body, whose favourable opinion and approbation I so highly prize.—Believe me, dear Dr. Armstrong, ever faithfully yours, W. P. O'BRIEN.' The important subject of establishing a Cork branch of the British Medical Association was brought before your committee by Dr. Johnston, and a sub-committee, formed for the purpose of ascertaining the ideas of the profession, with a view of carrying into effect this desirable object. The annual reports of the Association for the last ten years are suggestive and worth perusal, showing an amount of labour that has already accomplished substantial good, while much remains still to be done. For instance, the paramount question of 'Medical Reform,' embracing a sound preliminary and subsequent education, as well as the suppression of quacks and impostors; the inadequate pay of poor-law medical officers, and the fact that, after long responsible and laborious services, in discharge of which their health is often broken down, they receive no retiring pension, thus forming a striking contrast with other branches of the Civil Service. Again, the strange injustice so long pursued to our brethren of the Army and Navy, for a redress of whose grievances this association has long laboured, as well as the fact many times pressed on the authorities—namely, the important benefit rendered to the ends of public justice by skilled medical evidence given in courts of laws, the remuneration awarded being an outrage to which no other profession would for a moment submit. Long experience proves that a redress of these grievances can only be obtained by the continued exertions of medical men themselves, the result of which cannot be doubtful, founded as these exertions are on justice, reason, and conscience. 'In omni publico munere id solum spectare debemus quid justicia postulet, ratio pracipiat conscientia proponat.'"

Dr. E. R. Townsend said in the absence of Dr. Mackesy, who had devoted his time, his talents, and unwearied assiduity to the working out of the object of their association, he would move the first resolution. A great number of resolutions of much importance were to be proposed, which would require to be elucidated by the proposers, so that he would not take up their time by lengthened observations; he would merely move that the report as drawn up by their secretary, with his usual perspicuity, clearness of style, and happy classical allusions be adopted (applause).

Dr. Johnston, Midleton, seconded the resolution, which passed *nem con.*

Dr. O'Connor proposed the next resolution, which was:—"That, in the opinion of this meeting, the 'Medical Act's Amendment Bill,' shortly to be introduced into Parliament, is seriously defective, inasmuch as it makes no provision for an improved and superior system of medical education, preliminary and professional, or for the official prosecution of unregistered practitioners, or persons illegally assuming medical titles." It would astonish any one, he said, to think that the Medical Council, which was supposed to have been selected from their profession for the purpose of its advancement and progress, would neglect the important points and matters referred to in the resolution. It was impossible for their profession to hold the standing they claimed for it unless the education of the medical men was upon an equality with the other professions (hear, hear). It was the lot of doctors, whether in the army, navy, or in private society, to be introduced to men of the highest station, intellect, and the most refined manners; and to fit him for such society, their education should be equal to that of accomplished gentlemen. The speaker then enlarged upon the subject, and concluded by proposing the resolution amid applause.

Dr. Beamish seconded the resolution, which passed unanimously.

Dr. W. C. Townsend, in proposing the next resolution—"That it appears to this meeting that the several clauses of the Sanitary Act of 1866, applicable to Ireland, are sufficient to enable the local authorities to establish and carry out an effective system of supervision of the public health"—said he regretted very much that his friend Dr. Tanner was unable to be present, as he was to have proposed the resolution, and no doubt was quite prepared to speak on the subject. It must be very gratifying to them to find that Government had taken up this very important branch. The good effects of it were already manifesting themselves in this city, and their worthy Mayor had exerted himself unceasingly in carrying out the provisions of the late act. It was to be hoped that in other parts of the country, where such power was vested in poor-law guardians and other bodies, it would be as stringently and as fully carried out (hear, hear).

Dr. G. Wycherley seconded the resolution, which was adopted.

Dr. O'Flynn, jun., proposed—"That we cannot but express our regret that, in the late enactment which granted a retiring pension to superannuated poor-law functionaries, the medical officers should have been excluded. Inadequately paid as they are, even at the present maximum salary, hard worked, and their labours to the poor not limited to any hour of the day or night, we consider the worn-out medical men eminently entitled to a retiring allowance in their old age, and we trust that justice will be speedily done to them in this respect." He said in considering that resolution, one of the first questions to be asked was, if this superannuation allowance were granted, how was it to be paid. If out of the rates, it would encounter an amount of opposition that might prove fatal to it from parties who, perhaps, otherwise would be in favour of it. But there was no such intention on the part of those who advocated the movement and admitted the justice of the claims of those whom it concerned. It was proposed to assimilate the case in this respect to that of England, where, since 1846, half the poor-law medical responsibilities are paid out of the consolidated fund. It was to be hoped this would be extended to Ireland, and unless Ireland was to be always exceptionally treated in this as in political matters, the arrangement would be extended to this country.

Dr. Goulding seconded the resolution, which was carried.

Dr. Morrogh, after some brief but terse remarks, proposed the fifth resolution—"That, with our present limited knowledge of the army and navy medical warrants of 1867, one of which only has as yet been promulgated, and which falls short in some respects of what was looked for, we still hope that

when fully brought into operation they may be such as to increase the efficiency of both services."

Dr. M. Hobart seconded the resolution, and in doing so delivered a very practical speech, which was loudly applauded.

Dr. S. Hobart proposed—"That the medical profession is the only body whose services Insurance Companies obtain for less than their legitimate remuneration. This anomaly is the more striking, as those companies are mainly dependant on their medical advisers for the realization of their profits, and it only requires unanimity and self-respect on the part of the profession to do it away."

Dr. M'Evers seconded the resolution, which passed.

Dr. Cremen, in the absence of Dr. Shinkwin, proposed—"That the remonstrances so often addressed to the authorities in reference to the skilled medical evidence given in Courts of Justice, being still unattended to, we consider a strong necessity rests on all the Associations for continual agitation on this subject." It certainly, he said, was a monstrous grievance to think that an attorney could *subpœna* a physician to attend a court of justice to give evidence for a client, and was at liberty not to pay him for his attendance. A physician was to neglect his important public duties and his private practice, to attend and give evidence without being recompensed for his loss of time.

The resolution was seconded by Dr. Budd, and passed.

Dr. R. Callaghan proposed and Dr. O'Sullivan seconded—"That we have much pleasure in again recognizing and acknowledging the able advocacy of the press, on all occasions where the interests of the profession have been involved."

A vote of thanks was passed to the chairman, and the meeting adjourned.

Correspondence.

SIR CHARES COOTE, BART.

TO THE EDITOR OF THE MEDICAL PRESS AND CIRCULAR.

Sir,—In the *Northern Whig* of the 4th inst., there is a mistake as to the identity of the Sir Charles Coote who was recently fined in *London* for assaulting the Station-Master of the Charing-Cross Hotel. The paragraph in the *Whig* runs as follows:—"The frolicsome baronet in question entered as a medical student at the Royal College of Surgeons in Ireland about sixteen months ago, having duly passed the preliminary examination in Arts."

As the above statement, if uncontradicted, might seriously interfere with the professional and other prospects of my young relative and apprentice, I immediately wrote the following letter to the Editor of the *Northern Whig*, which he published in his paper of this morning, and which I shall feel obliged by your inserting in the ensuing number of the Medical Press and Circular.—Your obedient servant,

B. Wills Richardson.

March 7th, 1867.

"MISTAKEN IDENTITY.

"TO THE EDITOR OF THE NORTHERN WHIG.

"Sir,—Permit me to correct an error which appears in your impression of the 4th inst., regarding the identity of the Sir Charles Coote who was fined for an assault in London within the last few days.

"The Sir Charles Coote alluded to in your paper happens to be my apprentice—is not twenty years of age—has never been out of Ireland, and, consequently cannot be the 'frolicsome baronet' who committed the assault in question.—I have the honour to remain your very obedient servant,

"B. Wills Richardson, F.R.C.S.I."

"2, North Frederick-street, Dublin,
March 5th, 1867."

(On referring to Burke's Peerage and Baronetage, it will be seen, that there are two Sir Charles Coote's, both of course baronets, one Sir Charles Algernon Coote, the baronet at present studying medicine, the other Sir Charles Henry Coote of Ballyfin House, Mountrath, Queen's County.—B. W. R.)

POOR-LAW MEDICAL REFORM.

TO THE EDITOR OF THE MEDICAL PRESS AND CIRCULAR.

12 Royal Terrace, Weymouth, 5th March, 1867.

Sir,—I shall feel obliged by your inserting the annexed letter addressed to the President of the Poor-Law Board. I congratulate the Metropolitan Poor-Law Medical Officers on the success they are likely to achieve, and I trust the time will come when my provincial brethren will be equally fortunate.—I am, &c.,

Richard Griffin.

12 Royal Terrace, Weymouth, 4th March, 1867.

Sir,—Having already furnished you with a large mass of evidence on the medical treatment of the poor of England and Wales will, I trust, plead my apology for troubling you with the remarks I desire to make on your Metropolitan Poor Bill.

By the present law, one half the salaries of the medical officers, and the cost of medicines, when found by the Guardians, are a charge upon the Parliamentary Grant, and the other half on the common fund of the union; but by your Bill, as I understand it, the entire cost for the asylums will be defrayed by contributions from the Unions and Parishes forming the District, and in the case of the Dispensaries, from the common fund of each Union, and thus the consolidated fund will be entirely freed from the charge. Is this your intention?

In Clause 43 of the Bill you state, "the Guardians of each Union shall provide proper medicines, and the same shall be dispensed and furnished to such of the poor in receipt of relief as require the same." Now, it appears to me that, by the wording of the clause, no person will be entitled to medical assistance unless already *in receipt of relief*, and thus, in future, at least one-third of all the sick poor of the metropolis will be deprived of medical relief at the cost of the rates. Although I grant that many now receive relief both in England and Ireland who ought not to have it, still, the line confining medical assistance to paupers only is far too stringent. See pamphlet entitled "Evidence on Poor-Law Medical Relief," pages 6 to 7.

The question of who shall find the drugs for the poor is one of vital importance. I think they should be furnished by the Poor-Law Board, as the only means of insuring good drugs. This course is followed by the Army and Navy. On reference to pamphlet entitled "Evidence," pages 89 to 97, this subject is fully entered into, and in the remarks at page 92, last paragraph, the objections to the Guardians finding drugs are specially pointed out. The Parliamentary grant would be a convenient source from which the cost of the drugs might be defrayed.

The whole of the medical treatment of the poor, both in asylums and dispensaries, should be placed under the charge of the managers of each asylum district, in fact, the dispensaries might be made appendages to the asylums.—I have the honour to be, &c.,

Richard Griffin.

The Right Honourable the President
of the Poor-Law Board.

COPY OF MEMORIAL

To the Right Honourable Lord Naas, Secretary of State for Ireland.

Banbridge, February, 22nd, 1867.

My Lord,—I take the liberty of drawing your attention to a case in which I feel myself done injustice to by Dr. George Tyrrell, Coroner for the Southern Division of County Down; and were I not fully conscious of the justice of my case, I would not now trouble you with it, knowing that you must be greatly engaged with Parliamentary and other duties. I will be brief as possible. During last summer I attended an old man named Andrew Campbell, who had received a wound in

the back of his hand which was inflicted by his brother-in-law Patrick Dimond. After some time the hand and arm were attacked with erysipelas which proved very tedious. As he had only four shillings per week out of the Milltown Relief Fund, to support him and his wife, he was recommended to go into the Infirmary of the Banbridge Union Workhouse, in order that he might get proper nourishment. Of the advantages of the Infirmary he availed himself, and in course of a little time died. He was given out to his friends for interment, when a report got up that the wound was the cause of his death; and previous to his being buried, an inquest was held on him on 6th September, 1866, at which Dr. Malcomson, the surgeon of the Union and I were examined; and I may state to you that I was the leading evidence, for which I would refer you to Mr. Robert Erine, woolen draper, the Foreman of the Jury. When Acting-Constable James M'Guinness came for me, I was going out to the country, and was therefore obliged to go on behalf of the Crown, wait, and be examined. For my loss of time and evidence, Dr. Tyrrell informs me he cannot give me anything. He says he is only empowered to give £1 1s., and that he has given it to Dr. Malcomson. Now, I think I have, according to act of Parliament, a right to my fee, as a civil practitioner; and I am also of opinion when an officer of a public institution receives a fee, and a civil practitioner is set aside, it savours something of favouritism. Trusting your Lordship will give this case your consideration, I have the honour to remain your obedient servant, R. P. Brown M'Clelland, M.D.

Dublin Castle, 1st March, 1867.

Sir,—In reply to your letter of the 22nd ultimo, requesting payment for having attended as a witness at a Coroner's inquest on the body of Andrew Campbell, I am directed by the Lord Lieutenant to inform you that this is not a matter in which his Excellency has any power to interfere.—I am, sir, your obedient servant, Naas.

R. B. M'Clelland, Esq., M.D., Banbridge.

OBITUARY NOTICE.

THE LATE PROFESSOR GOODSIR.

This distinguished anatomist died last Wednesday at Wardie, near Edinburgh. He had, as is generally known, been for some years an invalid, but had only given up his active duties at the University within a very brief period. On Friday evening at the Royal College of Physicians of London, Dr. Andrew Clarke, in his first Croonian Lecture, of which we shall next week give a report, paid a feeling tribute to "his old master, John Taylor Goodsir," and pointed out how completely the just deceased pathologist had forestalled Virchow. He obtained the chair of anatomy in the University of Edinburgh in 1846, succeeding Dr. Monro. He had previously filled the office of Demonstrator in the University, as well as that of Conservator to the Museum of the Edinburgh College of Surgeons. As an original enquirer his reputation has long been European, and as a teacher his memory is enshrined in the hearts of many grateful followers in his footsteps. He died unmarried in his fifty-third year, an early age for one to have passed away from us, whose teachings have moulded the thoughts of many of the first living physicians and surgeons in Europe. It cannot but be a source of regret that his eager pursuit of science and feeble frame did not leave him time to collect his many scattered labours. Enough, however, remains to vindicate his claim to the highest distinction, and to prove that many of the so-called discoveries of Germany are but the reflected rays of his luminous genius.

Examination Papers.

KING AND QUEEN'S COLLEGE OF PHYSICIANS IN IRELAND.

Quarterly Examination for Licenses in Medicine, February, 1867.
(Second Day.)

(Continued from page 230).

Practice of Medicine.—Dr. Gordon.

1. What are the symptoms and physical signs of tuberculization of the bronchial glands?
2. State the causes, symptoms, and principles of treatment of pulmonary apoplexy.
3. What are the symptoms produced by the passage of a gall stone; and how would you treat them?
4. Give the symptoms, effects, and treatment of whooping cough.
5. What is the state of the blood in rheumatic fever?

The candidates also underwent a *viva voce* examination of five rounds of questions from each examiner.

QUARTERLY EXAMINATION FOR LICENSES IN MIDWIFERY—Feb., 1867.

Midwifery—Dr. Johnston.

1. What are the diameters of the brim, cavity, and outlet of the female pelvis?
2. What are the different positions the fœtal head presents at the brim?
3. Describe the passage of the fœtus through the pelvis, when the head presents in the first position (of Nægelè) at the brim?
4. What are the dangers most commonly to be guarded against during labour?
5. At what period after delivery does the secretion of milk usually take place, and what are the symptoms attendant thereon?

Midwifery—Dr. Ringland.

1. State the ordinary management of a patient in the third stage of labour?
2. Under what circumstances does the spontaneous evolution of the fœtus take place, and describe the process?
3. Specify the form of labour most hazardous to the mother alone; that to the child alone; and that to both mother and child?
4. Mention all the varieties of complex labour.
5. State the several stethoscopic symptoms of pregnancy, mentioning the value of each respectively, the earliest period at which each becomes available, and the sources of fallacy connected with each.

UNIVERSITY OF DUBLIN—TRINITY COLLEGE.

EXAMINATION FOR SURGICAL DEGREES.

Hilary, 1867.

Dr. Adams.

1. Give the symptoms of caries of the vertebræ, arranged accordingly as the disease exists in the cervical, dorsal, and lumbar vertebræ.
2. Give the symptoms of the disease which proceed from spinal caries, and consequent symptomatic abscess.
3. Give also those produced by irritation extending from the bones to the membranes of the spinal marrow, and to the medulla spinalis itself.
4. Give the prognosis which should be formed as to the probable results to be expected from the disease, as it exists in the cervical, dorsal, and lumbar regions of the spine, respectively.
5. Describe a case of dry gangrene of the foot, called "Pott's gangrene."
6. Give Baron Dupuytren's opinion as to the gangrena senilis of Pott, and its cause.
7. Give the treatment of the disease recommended by Mr. Pott.
8. Give the treatment also recommended by Baron Dupuytren.
9. Describe a case of ranula.
10. The surgical treatment of this disease?

SURGERY—PROFESSOR R. W. SMITH.

1. Describe a well-marked case of pulsating bronchocele.
2. Mention the *local* conditions that retard or prevent the union of fractures.
3. What *constitutional* causes produce the same effect?
4. Enumerate the methods of treating disunited fractures.
5. Causes, symptoms, and treatment of traumatic hernia cerebri?
6. Give the pathology of congenital hernia cerebri; mention the diagnostic characters of the tumour.
7. With what morbid states of the eye is "tremulous iris" connected?
8. Forms of inflammation and abscess that occur in the parotid space?
9. Characters of a benign nasal polypus?
10. Mention the forms of retro-pharyngeal abscesses; what symptoms and dangers attend them?

DESCRIPTIVE AND SURGICAL ANATOMY.

Professor M'DOWEL.

1. Contrast the vascular supply of the scalp with that of the integument elsewhere; and mention how this influences reparative action after injury.
2. Enumerate the bony connexions of the superior maxilla.
3. What arteries are necessarily divided, and what are liable to injury, in the operation for the removal of half of the lower jaw?
4. Describe anatomically the several steps of the operation for ablation of the tongue after Symes' method.
5. Mention any cases you are acquainted with of ligature of the internal iliac artery, and describe the operation.
6. Give the attachments, and describe the relations of the anterior annular ligament of the carpus.
7. For what disease has the division of this ligament been recommended, and by what surgeon?
8. What arterial anomalies may give rise to danger in the operation for strangulated femoral hernia?
9. Up to what age is disjunction of the lower epiphysis of the femur possible?

EXAMINATION FOR MEDICAL DEGREES.

HILARY, 1867.

PRACTICE OF MEDICINE.—DR. STOKES.

1. Compare the maculæ in purpura and in typhus fever, as to character, locality, and history.
2. How would your prognosis be influenced in a case of typhus by the period of appearance of the maculæ?
3. What is meant by Febris Senilis? In what does it resemble the Febris Infantum? Give the prognosis, and the most frequent complication.
4. How far does the history of epidemics of cholera favour the doctrine that it is a contagious disease?
5. At what period do the symptoms of uræmic poisoning appear in cholera? Describe these symptoms.
6. How would you treat suppression of urine in cholera?
7. What is the general result in the treatment of cholera by transfusion of saline solutions?
8. Describe the disease termed Exophthalmic Goitre or Broncocele; is it capable of cure? State whether it is originally an organic or a functional disease.
9. What are the symptoms of the crowing disease of infants (Laryngysmus Stridulus)? Give its pathology, prognosis, and treatment.
10. Explain the occurrence of aphonia, stridor, and sudden amaurosis of a single eye in aneurisms of the thoracic aorta and in disease of the heart.

PROFESSOR BANKS.

1. Describe the eruption in the regular form of morbilli, and the varieties in the appearance of the rash.
2. What are the most formidable complications of morbilli?
3. Enumerate the most frequent sequelæ.
4. Contrast morbilli and scarlatina in the stage of eruption?
5. What are the parts of the muscular system which may be the seat of paralysis in typhus fever, and their relative importance?
6. Enumerate the diseases which may occur as sequelæ of pertussis.
7. What are the principal points to be taken into consideration in forming an opinion as to the probable termination of pneumonia?
8. How would you treat suffocative catarrh?
9. Describe a case of gangrene of the lung, and state how you would treat it.
10. What is the pulmonic disease most likely to be mistaken for gangrene of the lung?

DR. AQUILLA SMITH.

1. What is Cusso, its therapeutic use, dose, and mode of administration?
2. Give the botanical name and characteristic distinctions of Common Hemlook, the characteristic test of its active principle, the preparations in the British Pharmacopœia, and the part of the plant from which each is made.
3. Enumerate the reputed antispasmodics in the Animal and Vegetable Kingdoms, which are in the Materia Medica. Give a description of one in each division, stating its dose, and mode of administration.
4. State the quantity of lime in one fluid ounce of "Liquor Calcis Saccharatus," and also the quantity in one fluid ounce of "Liquor Calcis."
5. What are the colour and appearance of the following tinctures when diluted with an equal bulk of distilled water:—"Tinctura Asafœtidæ," "Tinctura Benzoini Composita," "Tinctura Gentianæ Composita," and "Tinctura Cannabis Indicæ?"
6. Name the drugs which cause dilatation of the pupil, and those which cause contraction of the pupil, when applied to the eye, or administered internally.
7. State the composition of "Mistura Creasoti," and of "Pulvis Rhei Compositus."
8. In what respect does "Extractum Ergotæ Liquidum" differ from "Urgota?"
9. Name the preparations of Belladonna in the British Pharmacopœia, the part of the plant from which each preparation is made, and their respective doses and modes of administration.
10. Write a prescription in Latin, without abbreviations, for a tonic-aperient mixture.

CHEMISTRY.—DR. APJOHN.

1. Write the formula of crystallized phosphoric acid in its tribasic condition; explain also how the acidum phosphoricum dilutum of the Pharmacopœia is made, how its strength is determined, and how it is tested for nitric and for monobasic phosphoric acid.
2. Enumerate the different phosphates of which mention is made in the Pharmacopœia; and explain the process by which the calcis phosphus præcipitata is made; mention also any experiment by which it may be distinguished from alumina.
3. How is bismuthum album made? what is the formula which represents its composition? and how would you show that nitric acid is a constituent of it, and that it does not include either lead or arsenic?
4. What is the formula of potassæ permanganas? how is it made? and what is the reaction exerted by it on green vitriol in the presence of hydrochloric acid?
5. Give in symbols the composition of crystallized borax; and explain how it is made in Tuscany from boracic acid, and how this acid may be separated from it.
6. When calx chlorata is dropped into muriatic acid, chlorine is developed; give the theory of this reaction, and describe the volumetric process by which the exact amount of the chlorine disengaged may be determined volumetrically.
7. What is Schneider's process for separating arsenious acid from organic matter? State also how, when the separation is accomplished, the amount of the arsenic is determined by him.
8. How is the protein of Mulder made? and what evidence is obtained in the course of its preparation that unoxidized sulphur is an element of the proteinic compounds?
9. Mention the colour-tests for morphia, quinia, and cinchonia; and explain how you would ascertain the amount of each of these alkaloids in a mixed solution of their hydrochlorates.
10. Enumerate the various tests for albumen in solution, and state how you would distinguish coagulated albumen from fibrin.

ANATOMY AND PHYSIOLOGY.—PROFESSOR M'DOWEL.

1. Trace the course and distribution of the cerebral branches of the internal carotic artery.
2. Describe the fornix cerebri, and mention its connexions.

3. What phenomena would follow a section of the trunk of the fifth cerebral nerve?

4. Describe the scaleni muscles; give their attachments, and assign their actions.

5. What opinions are held as to the functions of Peyer's glands?

6. What veins have no valves? Indicate the position of the valves in the principal veins of the lower extremity.

7. What phenomena would you expect to follow a transverse section of one half of the spinal cord?

8. Describe the iris; what nerves are distributed to it?

9. Describe the tricuspid valve, and explain the mechanism of its safety-valve function.

10. Give a brief account of the arrangement of the minute vessels of the liver.

Medical News.

List of Entries in the Register of the Branch Medical Council (Ireland) for February, 1867:—

Sandham, Wm. Sale, Cork, L.R.C.P.Edin., 1866. L.R.C.S.Edin., 1866.

Ratton, James Joseph, Louis, Dublin, M.D.Q.U.I., 1865. Mastr. Surg., Q.U.I., 1866.

Cooper, Robert Heath, Enniskillen. L. Apoth. Hall, Dub., 1866.

Lynam, Terence, Strokestown, Co. Roscommon, L.R.C.P.Edin. 1867; L.R.C.S.Edin. 1867.

White, James, Kilkenny, L. Apoth. Hall, Dub. 1866.

M'Caw, John Dysart, Portglenone, Co. Antrim, L.R.C.S.Edin. 1866; L.R.C.P.Edin. 1867.

Craig, Richard Manifold, Dublin, L.R.C.S.I. 1866; L. 1867, and L. Midwif. 1867, Q.C.P.I.

Griffin, George Leake, Dublin, L.R.C.S.I. 1866; L. 1867 and L. in Midwif. 1867, K.Q.C.P.I.

Grealy Francis, Galway, M.R.C.E. 1865; L.R.C.P.Edin. 1866.

Hudson, Robert, Co. Kerry, L. in Med. Univ. Dub. 1865; L. 1865, and L. Midwif. 1866, R.C.S.I.

Conolly, James, Galway, M.D.Q. Univ. Irel. 1866; L.F.P.S.Glas. 1867.

M'Conaghy, Charles, Convoy, Co. Donegal, L.R.C.S.I. 1866.

Cholera at Port Glasgow.—It may be remembered that at the beginning of the year a sudden outbreak of cholera, resulting in a good many deaths, took place at Port Glasgow. After the lapse of nearly two months the disease has again appeared within the last few days, and four deaths have occurred, the victims being three young persons and an adult. The medical officers report a considerable prevalence of choleraic diarrhœa. It would seem that in a sanitary point of view certain portions of the town are still in an unsatisfactory state.—*Times.*

Board of Superintendance of City of Dublin Hospitals.—His Excellency the Lord Lieutenant has appointed Christopher Fleming, Esq., M.D., Member of the Board of Superintendance of the City of Dublin Hospitals, in place of the late Dr. Hutton.

Wounded Soldiers in Battle.—The Prussian papers mention a new plan for the care of the wounded on a field of battle, which was tried during the war, and has now been definitely adopted. Every surgeon is to be provided with a pocket book containing a pencil and a number of labels (like those sold for luggage apparently) with a string at one end. After attending to a wounded man, the surgeon writes on one of these labels the name of the wound and what he has done to it, signs the label, and ties it to the wounded man's button hole. Thus the man can be carried at once by the hospital attendants to the proper place, and the surgeon to whom he is bronght can learn in a moment the state of his wound, and proceed to dress it.

The Attempted Murder of Dr. Pritchard at Aberavon.—Captain Jones was brought before the Neath bench of magistrates, charged with having on Monday shot at Dr. Pritchard with intent to murder him. The complainant is a surgeon practising at Aberavon, and whilst returning home on Friday from the Margam Tin Works, of which he is part owner, the prisoner gave him a letter, telling him it was to demand money, and that he would wait till three o'clock for the prosecutor to consider it. The prosecutor told him he owed him no money, but if he appealed to him by way of charity he would give him some. On Saturday the complainant again saw the prisoner, apparently lying in wait, and avoided him. On the day in question the prosecutor was proceeding along a narrow lane when he saw the prisoner approaching him. The prosecutor asked him what he wanted? when he replied "I want my money or your life," at the same time producing a pistol. The prosecutor tried to avoid him, but soon felt that he was wounded on the right side of the temple, but not dangerously. The prisoner said when taken into custody, that he wanted to see the prosecutor on his way home, and that he fired because Dr. Pritchard tried to ride him down. The magistrates committed the prisoner on the charge of shooting with intent to murder.

Harveian Society of London.—Committee for the Prevention of Venereal Diseases:—Dr. J. E. Pollock, president; Dr. Broadbent, Dr. Chapman, Dr. Charles Drysdale, Dr. Tilbury Fox, Dr. Maudsley, Dr. Meredyth, Dr. Tyler Smyth, Dr. Menzies, Dr. Semple, Mr. Weeden Cooke, Mr. Curgenven, Mr. Gascoyen, Mr. E. Hart, Mr. J. Lane, Mr. Sedgwick, Mr. Teevan, Mr. H. Thompson, with whom will be associated Mr. Acton, Mr. Holmes Coote, Mr. R. W. Dunn, and Dr. Victor Bazire. Objects—To investigate the extent of the spread of the contagious diseases commonly called Venereal Diseases among the civil population of this country; to discuss the best means for preventing that widely-extended evil, and to report thereupon to the International Congress to be held this year in Paris. "Something more than the Contagious Diseases Act of 1866 is necessary, if the community at large, and not only our troops, are to be benefited."—From Dr. Jenner's address at the Epidemiological Society, as president for the session 1866-7. Communications and suggestions to be sent to Dr. Charles Drysdale, 99, Southampton-row, W.C., London; J. B. Curgenven, Esq., 11, Craven-hill Gardens, W., honorary secretaries.

Scurvy in the Mercantile Marine Service.—On Wednesday afternoon an adjourned inqury was held at the Bee-hive public-house, Greenwhich, before Mr. C. J. Carttar, coroner, into the circumstances attending the death of John Ashley, aged 27, a seaman on board the ship "Timour," belonging to Messrs. Ashton (of Manchester) and Rathbone (of Liverpool), who, with eight other seamen belonging to the same vessel, were admitted on board the "Dreadnought" Hospital ship suffering from scurvy contracted while on the homeward voyage from Calcutta to London. At the conclusion of the evidence, which was of considerable length, the coroner said he could not see why the supply of lime-juice should not be made as arbitrary as the requirement of vaccination in relation to small-pox. An Act of Parliament was urgently required on the subject, and ought to be taken up by the Government or some member of the House of Commons. Had it been proved in the present case that deceased's death had arisen from the bad quality of the lime-juice, he should have had no hesitation in ruling that the persons supplying it were legally responsible, but this had not been shown, the captain acting to the best of his judgment, and not giving it for dysentery. The jury returned a verdict of "death from disease of the lungs, accelerated by scurvy," and also expressed an unanimous opinion that the lime-juce tested by Dr. Dickson was of bad quality. Dr. Dickson said he thought it only right to add that by direction of the Board of Trade he had made inquiries, and found the ship to have been well found in other respects with good accommodation, but a supply of good lime-juice was nevertheless requisite.

Death from Chloroform.—An inquest was held on Wednesday week, at the Bank of England Tavern, Paddington, by Dr. Lankester, on the body of Edward Morrell, of 4, Union-street, Berkeley-square, a stableman, who was killed by the application of chloroform in St. Mary's Hospital. The deceased, a well-made, healthy man, was thrown out of a gig he was driving last Monday, and dislocated the thumb of his right hand. He went to the St. Mary's Hospital, where the surgeons endeavoured without success to reduce his thumb. They then suggested that he should take chloroform, whilst they would make a second and more painful attempt, but the wife of the deceased, who was with him, said he repeatedly and emphatically said he could not take chloroform, he could not bear it, and she implied in her statement to the jury that he had been compelled to take it against his will. After her interview with him the surgeons and the chief nurse state, deceased consented to take chloroform. Mr. Moore stated in his evidence that he administered to deceased for about three or four minutes, during which time he did not inhale more than one drachm. Witness noticed the pulse suddenly cease beating, and in a moment the patient was dead. During six months that witness had operated at the hospital he had administered

chloroform in about a hundred cases without any fatal result. Deceased died from the effect of the chloroform. After a lengthened inquiry the jury returned a verdict of "Accidental death."

OVARIOTOMY.—At a meeting of the Committee of Queen Adelaide's Dispensary, Bethnal-green, held March 7th, it was resolved that a room in the new building should be devoted to the above operation, under the care of Mr. Maunder, the consulting surgeon.

PAUPERISM.—The return issued by the Poor-law Board for the month of December shows that at the close of the year 1866 the number of paupers in receipt of relief in England and Wales exceeded 900,000, showing an increase of 2·5 per cent. as compared with the corresponding period of 1865, but a decrease of 2·6 per cent. as compared with 1864, owing to the improvement since then in the manufacturing districts. The increase of pauperism at the close of 1866 was not very great in any division of the kingdom except the metropolis; but there it exceeded 20,000, and amounted to nearly 20 per cent. The number of persons receiving out-door relief in the metropolis increased from 71,312 at the end of 1865 to 89,727 at the end of 1866.

REPORTED DEATH OF DR. LIVINGSTONE.—The following letters appeared in the *Times* of Thursday :—

"*To the Editor of the Times.*

"SIR,—With profound grief, which I am sure will be shared in by the nation at large, I transmit to you the following letter from Dr. Kirk, the former companion of Livingstone, and now Vice-Consul at Zanzibar, addressed to the Assistant-Secretary of the Royal Geographical Society.

"If the detailed accounts which are on the way to myself should arrive before Monday, they will be communicated to the Society on the evening of that day.

"It appears that my lamented friend had crossed the Lake Nyassa to its western side, and was there attacked by the same treacherous people, the Mazite, a branch of the Caffre race, described by him in his last book of travels. It may be as well to state that the nine Johanna men who escaped, and on whose evidence alone we at present have to rely, are natives of the Comoro Islands.

"If this cruel intelligence should be substantiated, the civilised world will mourn the loss of as noble and lion-hearted an explorer as ever lived.—I am, sir, your obedient servant,

"RODERICK I. MURCHISON.

"Royal Geographical Society, 15, Whitehall-place.

"'Zanzibar, Dec. 26, 1866.

"'MY DEAR BATES,—I have written fully to Sir Roderick three weeks ago, *via* the Cape of Good Hope and St. Helena, again *via* Mauritius and Suez, with all information we yet have got regarding poor Livingstone.

"'As I am going to Kilwa and Mikindany for a few days to see if anything is there known of the sad story, and to seek for any letters which may have been sent by Dr. Livingstone before crossing Lake Nyassa, I write a note to you that may go by any ship passing here while I am absent. On December 5, nine Johanna men of the party which accompanied Dr. Livingstone came to Zanzibar, reporting that on the west of Nyassa, sometime between the end of July and September, they were suddenly attacked by a band of Mazite, and that Dr. Livingstone, with half his party, were murdered. Those who returned escaped, as they say, through being behind and unseen, and they all depose to having helped to bury the dead body of their leader the same evening. Although in the details and in other things the accounts of the various men differ, they all agree that they saw the body, and that it had one wound, that of an axe, on the back of the neck. One man saw the fatal blow given.

"'The attack was sudden, and Dr. Livingstone had time to overpower those who faced him, and was struggling to reload when cut down from behind. I fear the story is true, and that we shall never know more of its details. Full statements have gone home, but this may reach Aden by an American vessel during my absence.

"'You will see, if this arrives first, that we have sad news for the Society on the way.

"'I remain, yours, "'J. KIRK.'"

Notices to Correspondents.

Communications to the London Editor should be addressed to 20 King William-street, Strand; to the Edinburgh Editor, at Maclachlan and Stewart's, South Bridge; and to the Dublin Editor, at 3, Lincoln-place.

All Contributions are attentively considered, and unaccepted MSS. are returned on receipt of stamps for postage; but the Editors cannot be responsible for any accidental loss, nor can MSS. or replies be delivered on personal application.

Contributions should be *legibly* written, and only on one side of the paper.

When proofs are forwarded it is of the utmost importance that they should be corrected and returned without delay.

Owing to great pressure on our space, we are compelled to defer the publication of several papers and letters till our next.

THE HORRORS OF CHIGNONS.

TO THE EDITOR OF THE MEDICAL PRESS AND CIRCULAR.

SIR,—Your contemporary may be quite right in directing attention to the danger of wearing false hair, and warning us of its attendant evils; but it is somewhat remarkable that the results anticipated have not been realised ere this. It is well known that our grandfathers and grandmothers wore false hair more generally than our wives and daughters; that it was usual to shave the head in order to wear a flowing wig. A glance at any portraits of the time of Charles II. will show how general the practise was in those days; even now in the Royal and many noble establishments, the attendants have to wear wigs to ensure cleanliness.

Respectable hair-dressers and wig-makers are supplied by regular hair merchants, of whom there are but three or four in London. By inquiry of one of these manufacturers, as they are called, I learned that they import the raw material chiefly from Germany and Italy. After passing it through a machine to remove gregarian deposit, &c., &c., they wash, card, boil, and bake it before putting it forward for sale. In each operation it passes under the practised eye of experienced workmen, who see that it is thoroughly cleansed from all impurities, and it would be impossible for such parasitical inhabitants to remain even in embryo; such hair is necessarily expensive, the supply is limited, and becomes yearly more so.

That what he calls "church-yard" hair is used for chignons is possible; doubtless, many tresses shorn from heads burning with fever find their way to the shops of the lower class hair-dressers, and by them used without preparation, and decorate the heads of their customers; but such hair would not be purchased by the regular dealers, for the simple reason that it would be *destroyed* in the course of preparation. Such hair is excessively brittle, vitality being destroyed at the root. Healthy hair, on the contrary, is elastic, and may be worn and brushed regularly for years.

Now, as a medical man, let me offer one word of advice for the fair wearers: buy of respectable dealers; brush and comb as regularly and thoroughly your artificial as you do your natural curls; use the same means to keep them clean and glossy; do not sleep in them, and rest assured there is no more danger from the one than the other.—I am, sir, yours, &c., SCALPEL.

LADIES' SKIRTS.

TO THE EDITOR OF THE MEDICAL PRESS AND CIRCULAR.

SIR,—Now that dry weather is likely to set in, it may be suggestive of a much-needed reformation to mention that I have met with at least one case of obstinate irritability of the mucous membrane of the trachea, which I can affirm to have arisen from the inhalation of dust tossed up by a lady's skirt. I suspect that many cases of the same complaint, as well as of conjunctivitis and ophthalmia, might be traced to the same cause; for who can say what animal virus, or what vegetable or mineral irritant, may not be contained in the dust tossed up by a long skirt, and then introduced into the nose, eyes, and throat of the by-passer.—Yours respectfully, E. CULLEN.

ON THE CURABILITY OF THE DEAF AND DUMB.

TO THE EDITOR OF THE MEDICAL PRESS AND CIRCULAR.

SIR,—The following question has been forwarded for examination at the ensuing Medical Congress in Paris, will you therefore oblige me by presenting it to your readers, especially as a correspondent in a Bristol paper of this week appears much interested in their welfare by *only* caring for the present half measures :

"On the curability of the Deaf and Dumb: their present care being entirely under Ladies and Gentlemen, the Medical Profession having no charge of them towards their cure, attention being paid to their state since 1837, a lecture thereon being delivered in the Bath Guildhall in 1856, when a Petition to the House of Commons was numerously signed, and duly presented and registered. That the cause of should be ascertained by the aid of registration of every infant at a month old, whether deaf or not."—I am, sir, faithfully yours,

WILLIAM PARKER, M.R.C.S.L.A.C.

CHLOROFORM ACCIDENTS.

TO THE EDITOR OF THE MEDICAL PRESS AND CIRCULAR.

SIR,—As bearing on the progress of anæsthetics and the caution necessary still in the administration of these agents, it would be well to note that the last fatal accident in London was while using an apparatus, hitherto deemed infallible in warding off accidents—the baloon appa-

ratus—and this is the second accident of this kind that shows us the inutility of trusting to mere mechanical arrangements to keep off danger. Sabarth (the Dr. Snow of Germany) has mentioned thirty-six deaths from use of ether, so that even here we have not much to depend on; while of "mixed vapours," also believed to be so safe, I have met recently in journals not less than four deaths. Everything thus far, indeed, points rather to a wider and better study of chloroform itself.—I am, &c., CHARLES KIDD, M.D.

P.S.—The chief number of deaths from anæsthetics still continue to be in trivial operations, showing the value of anæsthesia by ice or ether spray. Several very troublesome sloughing wounds, and possibly pyæmia, have, however, followed the too deep congelation by ether.

LATEST INTELLIGENCE.

THE PRINCESS OF WALES.

JUST as we are going to press, news has reached us from a reliable source that the symptoms have taken a rather alarming turn, and that Her Royal Highness is in a most critical state. In chronicling this sad intelligence, we have only to express a hope that the natural affection everywhere entertained for Her Royal Highness may have given rise to an exaggeration of the danger.

Appointments.

ANDERSON, D., L.K.Q.C.P.I., has been appointed Medical Officer and Public Vaccinator for the Cloghan Dispensary District of the Stranorlar Union, County Donegal, vice R. H. Pope, L.R.C.P.Ed., resigned, and appointed Medical Officer and Public Vaccinator to the Donegal Dispensary District and the Workhouse of the Donegal Union.

ARDEN, S., M.R.C.S.E., has been appointed Medical Officer for District No. of the Eccleshall Bierlow Union, Yorkshire, vice J. Gregory, M.R.C.S.E., deceased.

BURKE, T., M.D., has been elected Medical Officer, Public Vaccinator, and Registrar of Births, &c., for the Feakle Dispensary District of the Scariff Union, County Clare, vice P. V. M'Donough, L.F.P.&S. Glas., resigned.

CALDWELL, J. T., M.R.C.S.E., has been appointed House-Surgeon to the Dispensary, Chorlton-upon-Medlock, Manchester, vice John Rayner, L.R.C.S.Ed., resigned.

CRANE, C. A., M.D., has been appointed Medical Officer for the Hallaton District of the Uppingham Union, Rutlandshire, vice J. H. Spencer, M.R.C.S.E., resigned.

DWYER, H., L.K.Q.C.P.I., has been appointed Medical Officer, Public Vaccinator, and Registrar of Births, &c., for the Newport Dispensary District of the Nenagh Union, Co. Tipperary, and Medical Officer to the Constabulary of Newport, vice J. B. Kittson, L.R.C.P. Ed., deceased.

GODRICH, T., L.R.C.P.L., has been appointed Medical Officer for No. 2 or Walham-green District of the Fulham Union, vice N. Avent, M.R.C.S.E., resigned.

LEE, R. J., M.B., has been appointed Physician in Ordinary to the Western General Dispensary, Marylebone-road, vice F. Bagshawe, M.D., resigned.

M'CARTHY, J., L.R.C.P.Ed., has been appointed one of the Resident Medical Officers to St. Mary's Hospital, Manchester.

MEADE W., L.K.Q.C.P.I., has been appointed Medical Officer to the Cloyne Dispensary District of the Midleton Union, Co. Cork.

MURRAY, Mr. W. B., has been appointed Medical Officer for the Bockleton District of the Tenbury Union, Worcestershire, vice J. L. Sweet, M.R.C.S.E.

NEALE, J., M.D., has been appointed Honorary Surgeon to the Birmingham and Midland Counties Lying-in Hospital and Dispensary for Diseases of Women and Children, vice J. Archer, F.R.C.S.E., resigned.

PERKINS, J. R., L.R.C.P.Ed., F.S.A.L., has been appointed Resident Physician to the Royal Hospital for Sick Children, Edinburgh, vice W. T. P. Wolston, M.B., resigned.

ROWE, Mr. T. H., has been appointed Medical Officer for the Haverfordwest District and the Workhouse of the Haverfordwest Union, Pembrokeshire, vice J. D. Phillips, L.F.P., & S. Glas., resigned.

SMITH, C., M.R.C.S.E., has been elected Surgeon to the Halifax Infirmary.

SUTTON, F., M.R.C.S.E., L.S.A.L., Assistant Medical Officer of the Norfolk County Asylum, Thorpe, near Norwich, has been appointed Medical Superintendent of the Norwich Borough Asylum.

SWEET, J. L., M.R.C.S.E., has been appointed Medical Officer for the Tenbury District and the Workhouse of the Tenbury Union, Worcestershire, vice F. F. Thompson, M.R.C.S.E., deceased.

SWELLMAN, Dr. R., has been appointed Assistant Medical Officer to the Durham County Lunatic Asylum at Sedgefield, vice J. A. Campbell, M.D., appointed Assistant Medical Officer to the Cumberland and Westmoreland Asylum at Carlisle.

VALLANCE, T. J., M.D., has been appointed Medical Officer to the Whitechapel Union Industrial Schools at Forest-gate, vice James T. Vallance, M.D., resigned.

Medical Diary of the Week.

WEDNESDAY, March 13.

ROYAL COLLEGE OF SURGEONS OF ENGLAND.—4 P.M. Prof. Huxley, "On the Osteology and Dentition of the Sauropsida, or Reptiles and Birds."

ROYAL COLLEGE OF PHYSICIANS—5 P.M. Croonian Lectures: Dr. Andrew Clark, "On the States of Lung commonly comprehended by the term Pulmonary Phthisis."

HUNTERIAN SOCIETY.—7½ P.M. Council.—8 P.M. Mr. Maunder, "On Abscess of the Prostate, and Cases of Circumcision in the Adult."

MICROSCOPICAL SOCIETY OF LONDON.—8 P.M. Mr. W. Witney, "On the Changes which accompany the Metamorphosis of the Tadpole, in reference especially to the Respiratory and Sanguiferous Systems."—Dr. Mackintosh, "On a Gregariniforom Parasite."—Mr. Lobb, "On a New Form of Paraffin Lamp."

SOCIETY FOR THE ENCOURAGEMENT OF ARTS, MANUFACTURES, AND COMMERCE.—8 P.M.

THURSDAY, MARCH 14.

ROYAL LONDON OPHTHALMIC HOSPITAL, MOORFIELDS—Operations, 10½ A.M.

ROYAL INSTITUTION—3 P.M. Prof. Frankland, "On Coal Gas."

FRIDAY, MARCH 15.

ROYAL LONDON OPHTHALMIC HOSPITAL, MOORFIELDS—Operations, 10½ A.M.

ROYAL COLLEGE OF SURGEONS OF ENOLAND—4 P.M. Prof. Huxley, "On the Osteology and Dentition of the Sauropsida, or Reptiles and Birds."

ROYAL COLLEGE OF PHYSICIANS.—5 P.M. Croonian Lectures: Dr. Andrew Clark, "On the States of Lung commonly comprehended by the term Pulmonary Phthisis."

ROYAL INSTITUTION—3 P.M. Mr. E. B. Tylor, "On the Early Mental Condition of Man."—Dr. J. B. Pettigrew, "On Modes of Flight and Aeronautics."

SATURDAY, MARCH 16.

ROYAL INSTITUTION—3 P.M. Prof. Frankland, "On Coal Gas."

METROPOLITAN ASSOCIATION OF MEDICAL OFFICERS OF HEALTH.—7½ P.M.

Births, Marriages, and Deaths.

Announcements are inserted without charge, and must in all cases be authenticated with the signature of the sender.

BIRTHS.

WILKINSON.—On the 23rd ult., at Aston-road, Birmingham, the wife of A. G. Wilkinson, M.R.C.S.E., of a son.

LANSDOWN.—On the 26th ult., at Bristol, the wife of F. Poole Lansdown, M.R.C.S., of a daughter.

GIMLETTE.—On the 28th ult., at Merton-road, Southsea, the wife of Dr. Gimlette, H.M.'s ship "Lord Clyde," of a son.

FYFFE.—On the 1st inst., at Rodney-place, Clifton, the wife of Dr. Fyffe, Staff Surgeon Army, of a daughter.

BOYD.—On the 3rd inst., at Blenheim-street, Newcastle-on-Tyne, the wife of Dr. Jas. Boyd, L.R.C.S.E., of a daughter.

BRAID.—On the 4th inst., at Burgess-hill, Sussex, the wife of J. Braid M.D., of a son.

MARRIAGES.

MURRAY—STEWART.—On the 12th ult., at Paisley, William Murray, M.D., of Burley in Wharfedale, Leeds, to Sarah Anne, eldest daughter of James Stewart, Esq., of Paisley.

WOTHERSPOON—PRIMROSE.—On the 27th ult., at Royal-crescent, Glasgow, William Wotherspoon, L.F.P. & S. Glas. to Jessie M'Farlane, only daughter of Peter Primrose, Esq.

DEATHS.

HITCHMAN.—On the 3rd ult., at the Arboretum, Leamington, John Hitchman, M.R.C.S.E., for many years Surgeon to the Leamington Hospital, and the Warneford General Bathing Institution.

MORRIS.—On the 21st ult., Wm. Morris, M.R.C.S., of Tudor-road, Upper Norwood, formerly of Camberwell, New-road, aged 66.

SANDWITH.—On the 4th inst., T. Sandwith, M.D., of Park-terrace, Beverley, J.P., and late Surgeon to the County Prison for thirty years.

BURN.—On the 4th inst., at Cheltenham, R. D. Burn, M.D., Assistant-Surgeon Royal Artillery, on half-pay, aged 32.

FFOLLIOTT.—On the 1st inst., at Clonakilty, of malignant typhus fever, Saunders Ffolliott, Esq., M.D., third surviving son of the late Wm. Ffolliott, Esq., M.D., F.R.C.S.I.

Lectures.

ROYAL COLLEGE OF PHYSICIANS OF LONDON.

THE GULSTONIAN LECTURES.

By Dr. REGINALD SOUTHEY.

ABSTRACT OF LECTURE III.

Delivered March 8, 1867.

THE NATURE AND AFFINITIES OF TUBERCLE.

The three gland tracts of scrofula: the cervical, the thoracic, and the mesenteric. The course of scrofulous disease: its characteristic features. Why scrofulous pneumonia commits greater ravage at the apex of the lung than at its base. The distinction between scrofulous and tuberculous disease: in diathesis, in cachexia, and in pathology. Although thus specifically distinct, these two diseases exercise no excluding influence on each other. Acute and chronic tuberculosis. Inherited proclivity to tubercular disease. Acquisition of the disease. Inducing causes. The exciting cause. What period of life most prone to tuberculous disease. The first symptom of the established disease—a special form of irritation. The "Reiz" of Virchow. The development of the new growth out of connective tissue: its affinity for certain primary sites, and secondary dissemination by infection from these places. The parts most prone to be the seat of secondary distribution or metastasis. Therapeutic indications. Summary. Conclusion.

In scrofula, said the lecturer, there is a build of body which distinguishes its diathesis from that of tubercle. Scrofulous persons are large-framed and leanly built; their complexions are muddy, and they are generally torpid in mind and body. Those, however, who possess a tuberculous diathesis are tall and thin, light-weighted and slimly built, with fine silky hair, transparent skins, and often ruddy-complexioned cheeks. They are premature in everything, nervous, quick, and irritable. The scrofulous diathesis marks a preternatural vulnerability, to unhealthy, chronic inflammations; the tuberculous, a particular proclivity to one special form of disease; the first evidence of established tubercle is the presence of this new growth, the first proof of established scrofula, a glandular enlargement, the scrofulous tumour, which has succeeded some slight irritation or local ulceration. The lymphatic system appears the vulnerable part in scrofula; we may suppose the lymph glands and their vascular prolongations to be so far feeble in construction, that they are thrown out of gear with abnormal facility. The disease appears limited to certain tracks, of which the three principal are the cervical, the thoracic, and the mesenteric.

This circumscription of the affection within certain districts, is due to the primary irritation being confined in particular tissues, and extending only through particular channels; these tissues are the intercellular or submucous, and the channels aré the lymph vessels. Dr. Southey next described the scrofulous tumour, its course and progress, and showed why scrofulous pneumonia committed greater ravage at the apex of the lung than at its base, arguing strongly that "vomicæ" were evidence of abscess, but not of the cause of that abscess, and therefore not necessarily of tubercle. Amongst other reasons for this proclivity to infarction of the apices of the lungs, he noticed the larger relative size, and more embryonal state of the alveoli in the upper parts of the lungs. Scrofulous affections of the lung tend also to the formation of scar tissue, and to produce increased thickness of the walls of the bronchi, a condition of things especially favourable for the subsequent development of tubercle; finally, he said that the two diseases no way excluded each other, although in diathesis, cachexia, and in pathology, they were specifically distinct. Scrofula is pre-eminently a chronic complaint; its duration is the life-time of the individual thus afflicted, it is attended by only slight sympathetic fever, and this succeeds local lesions, whereas tuberculosis is an acute disease, febrile from the first, the acuteness of whose course is accurately measured by the amount of fever manifested. The effects of remedies also mark a striking difference in the two diseases, the one being amenable to good influences, and sound principles of treatment, whereas in the other we have as yet found out no febrifuge for the fever, and no specific medicine that operates against the development of the new growth that induces it. The strongest predisposing course of tuberculosis is the inheritance of a tuberculous taint, and statistics incline us to believe that sons inherit this proclivity more from their fathers, and daughters from their mothers. The susceptibility of individuals to become tuberculous is, speaking generally, greatest at the earliest periods of infancy, and diminishes with advancing years. Youth and childhood are more vulnerable because the tissues are then softer, and the habits of right in their development have been inculcated for only a short period of time. The disease, however, cannot always be derived from an hereditary cause, since, as it shortens life and exerts its greatest destructive influence upon the human race anterior to puberty, it limits the multiplication of the human species and should tend to die out itself by natural extinction; since, however, tubercular affections increase rather than diminish with the advance of civilization, we are compelled to accept its renewal or acquisition afresh from time to time. Sudden changes in the habits of life, sedentary employments, the crowding of people together in ill-ventilated rooms, exhausting over-work of mind and body; mal-hygiene, in a word, are the most frequent inducing causes of tuberculosis.

The exciting cause the lecturer attributed to some special form of irritation which forced the connective tissue elements to develop in a wrong direction. There ensues a local congestion round the new growth which should appear to develop itself with extreme rapidity. In the acute form of the disease in various parts of the body at the same time, and in the chronic in successive crops, tubercle possesses favourite primary sites; such are the serous membranes, the testicle, the kidney, the fat tissue of the omentum, the medullary tissue of bone; it is rare in the muscles, mammary gland, the ovaries, thyroid gland, the tonsils, the salivary glands, the skin; very rare in the stomach, and scarcely ever found in the œsophagus. The primary nodules are nests of infection, as Laennec formerly taught, the disease being disseminated first in the immediate neighbourhoods of the primary tubercle growths, and then by metastasis from these, probably in the course of the lymphatics from the parts they first attacked. Thus the prostate affects the vas deferens and epididymis, the intestines, the lacteals, and mesenteric glands, and the solitary conglomerate of the brain, the cerebral meninges. The principle of treatment is to allay irritation, and to limit, so far as possible, the first infecting source. Any sudden change of climate, or of their habits of life, must be strictly avoided by those who inherit a proclivity to tuberculosis. The most beneficial climate for such individuals is that in which the barometer and thermometer experience smallest variation throughout the year; finally, cold and moderately moist mountainous districts often benefit those who are afflicted with scrofulous lung abscess; but cold and variable temperatures do not suit tuberculous subjects.

The principal aim of the lecturer was to establish the difference that subsists between tuberculous and scrofulous affections, that they were allied to each other only in so far as they both could be said to belong to one large family of diseases—those, namely, which may be called lymphomatous formations—all such affections presenting certain affinities to tubercle, and when grouped round about it affording us a keener insight into its nature.

THE CROONIAN LECTURES

DELIVERED AT THE

ROYAL COLLEGE OF PHYSICIANS OF LONDON.

By Dr. ANDREW CLARK.

ABSTRACT OF LECTURE I.

Delivered Friday, 8th March.

The lecturer began by saying that though the scientific sin chiefly prevalent among us in these days was the reproduction of old ideas under the guise of a new and often specious terminology, we were not free from the opposite sin, which, though more honest in character, was not less injurious in its results. This was the repression and concealment of new ideas under the cloak of an antiquated and sometimes absurd phraseology. Neuralgia, rheumatism, gout, epilepsy, apoplexy, and Bright's disease were adduced as examples of terms involving the most diverse dynamic disturbances or organic states. So it was with the term chronic pulmonary phthisis, which, though comprehending various pathological states of lung, was commonly referred to one, or at most two, anatomical elements. The results of this mode of viewing the subject were shown to be disastrous alike to the science and art of medicine. The lecturer then enumerated and illustrated the following causes of this confusion:—First. Symptoms of damage to an organ are often more allied to disturbance of function than to the nature of the disturbing cause. Second. Our still imperfect pathological knowledge. Third. The fact that like pathological products are often brought about by unlike causes, and that changes apparently similar to the naked eye are found quite dissimilar when examined by the microscope; and Fourth. The effect of prevailing theories influencing our perceptions to see and our judgment to require only what was in unison with them. More accurate views of the pathological anatomy of phthisis were now dawning upon us, and the way to these had been opened by the labours of Addison, Williams, Peacock, Bennett, Wilks, Cotton, Stone, Sutton, and Greenhow. The light which Germany boasted to have thrown upon the changes undergone by the lung in phthisis, Dr. Clark declared to be light borrowed from England and transmitted back to us through a different and less transparent medium. He referred at length to the part which inflammation plays in the destruction of the phthisical lung, and gave the honour of this discovery to Addison of Guy's. Dr. Clark next alluded to the famous "Cellular Pathology" of Virchow, and endeavoured to prove that what was new, true, and valuable in it had long been anticipated by the genius and foresight of John Goodsir, whom death, with untimely hand, had just taken from amongst us. Admitting Virchow to be endowed with a splendid and variously gifted mind, the lecturer averred that his faculties were not, as in a great physician, so adjusted as to enable him to keep the exercise of imagination within the domain of objective reality to see truth from every side, and to force it into fruitful application to the necessities of men.

The lecturer then proceeded to show, that in persons dying of chronic phthisis, different states of lung were found, each of which was characterised during life by a more or less distinctly marked group of symptoms. What, then, were these different states of lung found after death? What the groups of symptoms by which, during life, these states were to be recognised? These questions were not yet wholly answered; and it was only by the careful collation and comparison of the results of clinical and pathological enquiry, that such problems could be finally solved. Dr. Clark proposed, on the present occasion, to confine himself to such a description of the pathological states of lung commonly comprehended by the term phthisis, as would serve for their distinction, and to avoid not only a very minute account of these states, but also historical and critical examination of the opinions of others, except in so far as might be necessary to attack a flagrant error or defend a cardinal truth. He proposed to speak chiefly from his personal experience, as in part expressed by his collection of specimens shortly to be placed in the College Museum. He then proceeded to map out the distinctive states of lung occurring in phthisis, and explained his reasons for declining at present to introduce a new nomenclature. After a few clinical sketches of the leading types of phthisis, the lecture concluded with a description and explanation of the table subjoined:—

NAME.	CHIEF ANATOMICAL CHARACTERS.
1. Tubercular granular or specific phthisis.	The true grey ganulation; pigmentary tubercle; fibrous tubercle; cellular tubercle?
2. Scrofulous or epethelial phthisis.	Primitive yellow tubercle; accumulation, cheesy degeneration and disintegration of epithelum-like cells.
3. Catarrhal or bonchial phthisis.	Ulceration of bonchi, with adjacent fibroid and cellular deposits and cheesy degeneration of the same.
4. Pneumonic phthisis.	Disintegrations of recent or old deposits occurring in vesicular, lobular, or lobar pneumonia—primary or secondary, ordinary or scrofulous.
5. Fibrous phthisis (cirrhosis: chronic or interstitial pneumonia).	Fibroid or fibrous deposits, with cheesy degeneration of included portions of lung, due to— *a.* Mechanical irritation (as in masons, grinders, miners, &c). *b.* Chronic pleurisy. *c.* Rheumatic inflammation of interlobular tissue. *d.* Constitutional states, as in granular kidney and liver.
6. Amyloid phthisis.	Circumscribed or diffuse cellular formations, infiltrated with the amyloid material.
7. Syphilitic phthisis.	Cheesy disintegration of nodules of nucleo-fibrous tissue, and diffuse infiltrations of the same.
8. Hæmorrhagic phthisis.	Cheesy degeneration and disintegration of nodules of extravasated blood.
9. Embolic phthisis (including pyæmic deposits and suppurations).	Cheesy degeneration and disintegration of grey or yellow deposits, arising directly or indirectly from pulmonary emboli, coming from the liver, lymphatics, or veins.

CLINICAL LECTURES

DELIVERED IN

STEEVENS' HOSPITAL,

TOGETHER WITH

OBSERVATIONS ON PRACTICAL MEDICINE.

By Sir HENRY MARSH, M.D., Bart.,

PHYSICIAN IN ORDINARY TO THE QUEEN IN IRELAND.

Edited by J. STANNUS HUGHES, M.D., F.R.C.S.I.,

PROFESSOR OF SURGERY IN THE ROYAL COLLEGE OF SURGEONS IN IRELAND, SURGEON TO THE LORD LIEUTENANT'S HOUSEHOLD.

OBSERVATIONS ON THE HEMORRHAGES.

Introductory to the consideration of the more important of the hemorrhages, I shall make some remarks upon *Epistaxis*.

In the works of systematic writers this variety of blood-flow is, with few exceptions, deemed so trivial, so unimportant, that scarcely a short chapter is devoted to its distinct consideration. Yet, if closely looked into in all its bearings, relations, and varieties, it will be found, by both the speculative and the practical pathologist replete with interest. One form, which I shall term the spontaneous or

idiopathic variety, furnishes us with the surest index of that state of the system termed the hemorrhagic.

Of the hemorrhages this is generally (there are, however, exceptions) the least formidable variety; it is, nevertheless, the most frequently valuable as a constitutional index.

Furthermore, there have been cases of epistaxis (and of these not a few) in which the torrent of extravasated blood has been so copious and so prolonged, as seriously to peril life; and in the treatment of which sound judgment and promptitude in action have been imperatively demanded. Judgment, to determine the moment when, without injury to the patient (for it is often a salutary effort of nature), the hemorrhage may be checked. Promptitude, in effecting, speedily and thoroughly, the object of arresting the destructive overflow of the vital fluid.

Close observation of the natural process by which this exudation is effected, affords much useful instruction, and teaches us what the true nature is, of many of those internal and unseen hemorrhages, which were formerly, and still are popularly, referred to the rupture of the trunk of a blood-vessel. This, doubtless, is the occasional, but comparatively rare cause of a fatal hemorrhage. The most frequent cause of hemorrhages, often fatally profuse, is,—as may be observed in epistaxis, capillary exudation,—blood extravasated, not from an arterial or venous trunk, but from myriads of turgid capillary and exhaling vessels.

A remarkable case, elucidating this truth, occurred at Steevens' hospital. A young man labouring under hemoptysis was admitted a few hours before my morning visit. Having spoken to, examined, and prescribed for him, I passed on. Whilst talking to the patient who lay in the next bed, I heard a gurgling sound and turned round: the man to whom I had but a moment before been speaking was dead,—was suffocated. A minute and careful examination disclosed neither tubercle, nor cavity, nor consolidation, nor lobular nor diffuse apoplexy, nor ruptured trunk, in any part of the parenchyma of the lungs; all the larger bronchi were nearly filled with blood, which was coagulated in them, particularly at and about the bifurcation, so as to obstruct the ingress of air. It was a case of bronchial hemorrhage,—of copious sweating of blood from innumerable capillary tubes distended with blood. I say sweating, because I doubt there being any rupture or breach of surface.

In some forms of fever, sweating so profuse has occurred as to soak through the bed, and to accumulate in large quantites in a vessel place underneath.

A capillary extravasation of red blood may be as profuse as a capillary exudation of white blood. A mucous membrane may copiously sweat blood; I have seen the same thing happen from the pores of the external skin of the face. One case, a very remarkable one, I shall briefly refer to. The patient was a young woman four or five and twenty years of age; herself intensely strumous, as were also her parents and brothers; she was subject early in life, both before and after puberty, to spontaneous epistaxis. She was attacked with fever. The symptoms presented the usual aspect of scarlatina; a dusky red rash was universally diffused, with sore and swollen throat, but no ulceration. There was a well-marked febrile movement in the system. On the third day the whole characters of the case were altered: fever subsided, the throat was no longer complained of. Quite suddenly, petechiæ, some very small, some as large as a split pea, appeared under the cuticle, and were rapidly scattered over the whole surface; their colour was livid, and they soon became black as ink. After the lapse of a few days dark grumous blood began to ooze from the gums, from all the points of junction of the internal and external skins, and from the nares, and appeared mixed with the urine and fæces; patches of ecchymosis stained the skin over large spaces. The debility, vascular and muscular, was extreme, and the fetor emanating from the breath and whole person in the highest degree offensive. All signs of scarlatina vanished.

In this miserable state, with a gradual augmentation of every worst symptom of purpura hemorrhagica in its most malignant form, she lingered on for nearly three weeks.

For many days before death the following remarkable phenomenon manifested itself. Blood oozed and descended in streams from the pores of the skin of the face, and, of all the external skin from those of the face only. With intense interest I watched the process. The surface having been wiped clean, minute globules of dark blood were seen to exude from every pore; these rapidly increased in size, coalesced, and formed streams which flowed on every side; a profusion of blood was thus extravasated, in like manner as drops of rain increase in size in descending, unite, and form tortuous little rivers, on the glass of the window of a carriage.

Whether attributable to the great tenuity of the Schneiderian membrane, connected with the delicacy of the sense of smell, or to the highly vascular net-work of this membrane, or to the copiousness of the supply of blood to the brain, or to all unitedly, certain it is, that of all the hemorrhages, that most frequent of occurrence is epistaxis.

To this variety of hemorrhage some are much more prone than others, and this may depend not only on constitutional causes, such, for example, as mal-organized blood, but also upon superior delicacy of the mucous membrane and its vessels; a condition of mucous membrane, as well as of external skin, frequently characteristic of struma. Whatever be the cause, the fact is certain, that blood streams from the nares with more facility than from other mucous surfaces.

This is the case, in varied degrees, at every period of life, but much more remarkably so at the extremes of life; the most frequent time of occurrence of epistaxis is, however, during the period of growth. I have many interesting cases recorded which prove that this hemorrhage, having appeared in early youth, disappears during mediæval life, and returns as years accumulate and old age approaches. The period of senility varies much in differently constituted individuals, and is hastened or retarded by the events and habits of the past life.

It is a curious fact that the epistaxis of the growing period of life should, in so many instances, resume its sway toward its close. It may be termed the *Epistaxis redux* of advanced age. Within the last few days I attended a lady, now in her seventy-fourth year, affected with severe hemoptysis. Thrice before, several weeks having intervened, she was similarly affected, and twice previously to the attacks of hemoptysis, she bled profusely from the nose. Inquiry elicited the following facts: In early life, antecedent to the full establishment of the catamenia, she had been a martyr to idiopathic epistaxis; at the menstruating periods she suffered habitually much pain, and the discharges were very profuse, and at the period of the cessation of the menses, when they recurred at long and irregular intervals, the hemorrhage was excessive, and the blood came down in large clots. She had been married at a young age, but had never been pregnant. This old lady does not appear to labour under any organic disease; the heart's action and the breath sounds are perfectly normal. I have on record several equivalent cases.

Considering, then, the facility with which blood is exuded from the nares, it is not contrary to anticipation that mental emotions should so affect the vessels of the brain, as frequently to give rise to epistaxis. Congestions, inflammations, and diseases of the brain, are frequently preceded and accompanied by epistaxis; this I shall have occasion hereafter more particularly to notice. Those mental emotions which produce cerebral congestion (for some, not all, produce this effect), are often signalized, and relieved too, by a flow of blood from the nares. Epistaxis is thus often a naturally provided safety-valve. The following event, of which I happened to be an eye-witness, illustrates this principle. A child of some two and a half or three years of age, in attempting to descend a flight of stairs, fell, and rolled down to the first landing-place. He was much hurt, and cried bitterly. The nurse, a strong plethoric woman, greatly attached to the child, ran

to take him in her arms; the child's father, at the head of the stairs, sternly forbade her to touch him ; she was compelled (standing at the foot of the stairs) to look on. Another attempt (after many efforts and touching appeals for help) was made by the child to descend. Again, he fell. The nurse could endure it no longer; her feelings overpowered her. She rushed upstairs and took him in her arms, and exclaimed, in a highly excited tone, "If it cost her her life she would save the child." She became deeply flushed, and a copious stream of blood rushed from both nostrils. This woman, whom I had frequent opportunities of afterwards seeing, had never been subject, previously or since, to any form or variety of abnormal hemorrhage. This was a well-marked instance of a strong mental emotion causing epistaxis of temporary origin, and altogether exempted from any pre-existing or hereditary hemorrhagic diathesis. I shall, on a future occasion, notice how frequently this diathesis, connected with struma, is hereditary.

A lady, in her fortieth year, of florid complexion, and uncontrolled temper, in a fit of furious and unrestrained anger, was seized with epistaxis. Blood from both nostrils flowed in profusion, and persisted so long that her family became seriously alarmed. When I saw her, she was nearly pulseless; there was a death-like pallor present, and a cold, clammy, perspiration; her voice was feeble, and she could articulate only in a whisper, yet she did not appear to be alarmed. There was no time to be lost; much blood still flowed; much descended from the posterior nares, and was swallowed; some hours previously she had vomited blood. Antecedent to my visit, all the usual means to check the blood-flow had been in vain employed. Upon close examination it was ascertained that the flow of blood was much more profuse from the left than from the right nostril ; by means of a flexible catheter passed along the floor of the nose, a plug, with a strong silk thread firmly attached, was through the mouth introduced into the left posterior nostril. This completely controlled the blood-flow at that side; as it was not desirable too suddenly wholly to arrest the bleeding, the other nostril was not plugged. The loss on the right side became now comparatively small.

So much distress, so many unpleasant consequences have occasionally arisen from the plugging of both nostrils, that, whenever practicable, one of the air passages should be left free. The double plug is often needlessly applied. Sometimes, however, it is unavoidable. It may be well to remark, that if sponge be used for a plug, it is better to enclose it in lint, otherwise, when distended by moisture, it may so insinuate itself into the narrow spaces between the delicate bones of the nose, as to cause difficulty and even injury in its removal.

Months elapsed ere this lady recovered in health, strength, and complexion, from this profuse and prolonged nasal hemorrhage. In early life she had been subject to idiopathic epistaxis; her menses were always superabundant, sometimes extremely profuse. At each of her confinements her losses of blood were enormous. About a week before the attack of epistaxis she had menstruated copiously. Her habits of life had always been temperate. Thus, in this case, a fit of anger, or rather of fury, was the exciting cause of the epistaxis. But its dangerous profusion is to be attributed to the pre-existence of a well-marked hemorrhagic diathesis.

The leading facts of another somewhat similar case shall be briefly detailed.

Mrs. S., aged 49, has ceased for a year and a half to menstruate. She is now labouring under organic disease of the heart. The symptoms indicate the existence of contracted orifice of the mitral valve. She has had two severe attacks of rheumatic fever, one before puberty, one at the age of 26. Eight years have elapsed since she first complained of dyspnœa and palpitation. Thirteen years ago she sustained a severe mental shock, by the sudden and unexpected death of her mother, to whom she was fondly and devotedly attached; the more, perhaps, because, though long married, she was childless. The mental emotion produced by the suddenly imparted news of her mother's death was very great, she was seized with violent headach, which was followed by most profuse epistaxis; for three days the hemorrhage never ceased. She lived in a remote part of the West of Ireland, and it was not until the fourth morning after the commencement of the attack, that the physician reached her house; he found her pulseless, and apparently dying. He plugged both nostrils ; she was unable to articulate, and with difficulty could swallow; she lay for upwards of three weeks in a state of insensibility; this period of time was a blank in her existence. She slowly recovered, but her natural complexion, vigour, and strength, she has never since then repossessed. In her case it is especially remarkable that, from the earliest age up to the full period of puberty, she had been subject to idiopathic epistaxis, so much so as to interfere with all her girlish amusements and occupations. The flow of blood was never during her early life profuse, but occurred so frequently, sometimes spontaneously, sometimes from the slightest causes, that she lived in a state of perpetual apprehension. When the menses were fully established the epistaxis ceased, and did not again recur till, as related, a powerful mental emotion recalled the latent predisposition, and accounted for its all but fatal persistence and profusion.

In the pages of history we meet with several instances of hemorrhage produced by the most overwhelming of mental influences, wounded pride, thwarted and disappointed ambition. A Doge of Venice burst, as is narrated, a blood-vessel, and died suddenly, when he heard the bell of St. Mark's announce by its toll the appointment of his successor. At Salisbury, the perverse, mentally blind, and unfortunate monarch of England, James II., was, on the eve of an expected battle, which he never fought, seized with epistaxis. It continued, and confined him to bed for three days.

The influence of augmented heat or caloric upon the cerebral circulation, becomes a frequent cause of temporarily excited epistaxis. Hence it is that, at the hottest seasons of the year, hemorrhages in our climate are most frequent. Hence also it is that an overheated bath, heated rooms, indulgence in ardent spirits, the sun-stroke, violent exercises, so affect the circulation that hemorrhages oftentimes immediately ensue. Intense thought, long persisted in, renders the vessels of the brain turgid, and gives rise to a blood-flow.

Hence, too, the great imprudence and injury of ordering those patients threatened with phthisis, who evince the hemorrhagic diathesis, to overheated and dry climates; those who labour under what I have elsewhere termed hemorrhagic phthisis should never be sent to a climate which tends directly to augment the existing and often fatal evil.

Those causes which suddenly excite and stimulate the heart's action, so as to propel blood more rapidly to the brain, do, in many persons, give rise to epistaxis. In fevers, at the commencement of the stage of reaction, this is especially and strongly exemplified. A flow of blood from the nares is the starting-point of many fevers, of none more frequently than the Rubeolous.

Some months since I happened to attend two boys, each about ten years old, in the same room. They were playfellows and companions, but not relatives. I was much struck by the contrast between these two cases. One possessed a sound constitution, free from any hereditary taint, and had never been affected with idiopathic epistaxis. The other had not long recovered from a tedious and prolonged succession of strumous abscesses of the cervical glands, which left characteristic and deforming scars and cicatrices. From infancy he had been prone to distressing and perpetually recurring attacks of epistaxis. Twice the blood-flow was seriously profuse. Both these boys were attacked, within a few days of each other, with measles. At the time when the rash was beginning to appear they both complained of headach, and they both bled from the nose; the boy with untainted constitution had no recurrence of the bleeding, was greatly relieved by it, and passed through the disease without one untoward symptom; the boy who was marked with the signs of struma (both his parents were in-

tensely strumous) during three days bled so frequently, so copiously, that his life was endangered. The former was in a few days perfectly restored; but months elapsed ere he who was marked with struma resumed his former ruddy and deceptive appearance of health.

Thus were evinced, in strongly contrasted relief, the temporary and salutary epistaxis of a perfect constitution, and the protracted and exhausting epistaxis of the distinctly impressed strumo-hemorrhagic diathesis.

Here it may be noticed how very distinct the hemorrhage of incoming fever is from that which takes place towards its close. Epistaxis is the most frequent variety of bleeding during the hot stage; intestinal, sometimes uterine, when the fever is advanced; and when, at this stage, it, or any other variety of hemorrhage, sets in profusely, it is a most formidable symptom, and indicates the great change which has been wrought by continued febrile action in the component ingredients and constituency of the blood. At the ingress of the reaction of fever no material change has as yet been produced; towards the close the blood has been thinned and altered.

Of all the signs of the febrile movement the most invariable is wasting. No matter what the type, this is the most uniform result. Scanty are the supplies; the primary assimilative function is, in a great measure, suspended; so must be that of sanguification. The body feeds upon itself: as fever progresses, the blood becomes more and more attenuated; and in those fevers which are caused by malaria and by animal and other poisons, the blood becomes so deteriorated, so reduced in tenacity and density, that it oozes and is exhaled from mucous surfaces. Thus a passive hemorrhage is produced, altogether distinct from the active hemorrhage which so frequently, at the incoming of fever, relieves the tension and increased action of the vessels of the brain.

(To be continued.)

Original Communications.

REMARKS ON AFRICAN, WEST INDIAN, AND OTHER FEVERS AND DISEASES.

By ALEXANDER LANE, M.D., Surgeon Royal Navy.

(Continued from page 212.)

FEVERS are treated symptomatically, as certain symptoms require certain medicines, thus ignoring the cause; you cannot allay the symptoms without diminishing or decreasing the strength of the poison, and if these medicines cannot do that, of what use are they? If you cannot prevent the blood running into a state of putrefaction, how can you cure the disease? Looking at it as a disease, can a locality be assigned to it? We have all the symptoms, but is it in the brain, or any of the organs, as the liver, spleen, kidnies, or is it in the skin, bones, muscles, arteries, veins, nerves? the whole system is affected, and therefore we can only refer it to a poisoned circulation, with a determination to the finer vessels of the alimentary tube, and its adhesions. When post-mortem examinations prove this in the more active and violent, the same will be the result though not so discernible, in all the milder cases; then to get rid of this stranger in the blood would seem to be the first duty we have to perform, as, so long as it is there, the heart will continue to drive the blood into and destroy the finer tissues.

Evacuants may lessen the violence of the symptoms, but they will not destroy the poison, nor prevent the blood from running to putrefaction; it will require a specific to do this, and mercury or preparations of potash will do it. I do not now refer to simple irritative fevers or febrile affections produced by some local irritative action, but to that produced by some peculiar poison—as soon as the system is placed under their influence, the symptoms will soon disappear; mild tonics will restore the tone of the stomach, and convalescence will follow. Enemas composed of castor oil well beaten up with eggs and gruel will relieve the lower bowels, and a sleep and rest are absolutely requisite. I have found morphine to answer those purposes most admirably. When vomiting of blood supervenes, and indeed, when it becomes unusually violent, I have found a valuable remedy in the acetate of lead in doses of ten grains every two hours, or if the case is urgent every hour. I discovered about twenty-five years ago that this medicine was not poisonous when administered by itself, and published my cases in THE DUBLIN MEDICAL PRESS of that period; combined with opium its medicinal virtues are destroyed by chemical affinity; notwithstanding this and a similar discovery (?) made by a Dr. O'Grady of the Kilmainham Cholera Hospital *seven years after*, who had ventured upon *seven* grains *twice* or *thrice* a day. I believe, on perusing the columns of THE DUBLIN MEDICAL PRESS AND CIRCULAR of the present day, I find the old form still adhered to.

As soon as the rigors had ceased I gave immediately croton oil, and usually had the intestinal tube thoroughly cleaned and within an hour; I generally applied on the tongue, half a dozen drops at a time until the medicine produced the desired effect. I then placed the system, as soon as possible, under the influence of either of the former medicines; I gave large doses at short intervals until the desired effect was produced, and as soon as this had been obtained, I felt no further anxiety about my patient, that is as far as the poison was concerned. I had now to contend with debility, and endeavour to restore health as soon as possible, which is a task not so very easily accomplished in a tropical climate. I found plain cold water the best drink, and patients usually preferred it to any other, at least until the restoration of taste.

I never lost a patient from any kind of "fever" whose system I could place under the influence of either of the above medicines.

In this disease when medicines, in the iphigenia, were prescribed for symptoms, I observed that they did not produce the desired effect, no matter how frequently administered or how large the dose; this at the time occasioned much reflection and consideration, and was one of the causes of enquiry into the real nature of the disease, as I thought it strange at that time that they produced no alleviation whatsoever. The cause was in the system upon which they appeared to have no effect, there was a sort of "vis a tergo" behind, which had not been overcome, and as they seemed to have had no power over it, their administration was waste and loss of time.

A few words now regarding cholera. I am of opinion that whether it is called pure Asiatic, English, Irish, or French, the producing poison is essentially the same, differing only in degree of violence; for that poison which produces cholera will produce no other disease whatever, therefore the cholera poison is, like all other poisons, *sui generis*, and acts almost specifically upon the organs of nutrition, and is also very peculiar in its action. I do not know a disease which is not produced by some specific poison. Where the circulation is impeded there will be disease, but in general cases you expect a general issue; yet in this case, though general, it appears that it will attack the stomach and rectum and a portion, or perhaps the whole, of the colon, and leave the intermediate portion alone. The modes of treatment are so various, as a specific has not yet been found out, that it is really difficult to make a selection. The cases which came under my observation in India were about the usual type; however, they yielded to opium and brandy, with external stimulants and rubefaciants. The physicians I met with in India were certainly loud in their praises of opium, but, as they said—and I perfectly coincided with them—that opium, to be useful, must be given in large and powerful doses, and also in a liquid form, in consequence of its immediate action upon the coats of the stomach; and should a dose be rejected, there should be no hesitation about the second or third repetition, in fact repeated as often as necessary.

One afternoon at Jamaica, in 1827, I was sitting chatting with a brother officer in a verandah. We were helping to pass the time with cigars, having got tired of billiards. The verandah faced the sea, and a delightful sea breeze was blowing at the time, so that it was really quite cool and comfortable for such a climate. He got up suddenly and said he felt sick. "You are going to have an attack of 'fever,'" I said. "Nonsense," he replied; "why, a moment ago I never was better in all my life; it is that nasty cigar," he added, throwing the remains of it over the verandah. "Perhaps you will find it no nonsense," I said; "it is no joke, I can tell you, to be taken sick here; you may find it turn out a very serious affair." This I said by way of raillery, not suspecting for a moment that he was going to have an attack of "fever," as the island was healthy at the time, and no suspicion had ever been entertained that such an event was likely to happen, more particularly as there was no apparent cause for it, and he was very abstemious. He walked to the end of the verandah and back to where I was seated, and was instantly seized with rigors. Within six-and-thirty hours he was buried. The question has often occurred to me—how long will the poison remain in the system until it makes its attack?

On questioning patients—and latterly I made these questions very pointedly—I never could elicit from them anything like a predisposition or symptom foreshadowing such an event.

The island is seldom free from sporadic cases, and the above was one of them. It produced the usual feeling of dread at the time, but as none others occurred in the space of a week, it was soon forgotten.

HISTORY OF VACCINATION.

By W. H. SANDHAM, M.R.C.S., Cork.

The brief history of vaccination published by me in The Medical Press and Circular of the 9th January, 1867, will be rendered more complete and correct by the addition of the following information, which, as a Corkonian, interested in upholding the character and fame of my native city, I take great pleasure in publishing.

Dr. John Milner Barry, of Tunbridge Wells, having discovered that I was not in possession of the history of the early introduction of vaccination into Cork, in a letter dated 22nd January, 1867, kindly writes as follows:—"In your instructive paper on the 'History of Vaccination,' in The Medical Press and Circular of January 9th, 1867, you have not referred to the early history and to the introduction of vaccination into the City of Cork, which is the more remarkable, as the 'Beautiful City' received this boon *at an earlier date than any other city or town in Ireland.* 'Vaccine inoculation' was introduced into Cork in June, 1800, by the late Dr. Milner Barry, and between that date and November 20th, 1800, upwards of two hundred persons had been successfully vaccinated. For proof I refer you to a pamphlet published by him, a copy of which you will find in the Royal Cork Institution. There is a copy also in the Library of the Royal Medico-Chirurgical Society of London. As a native of Cork, and the son of the author of this pamphlet, I take much interest in everything relating to the introduction and spread of vaccination in Cork." This pamphlet, Dr. Caulfield, Librarian to the Royal Cork Institution, kindly hunted out for me a few days ago—here is a copy of the title-page—"An Account of the Nature and Effects of the Cow-Pock, illustrated with cases and commuincations on the subject; addressed principally to parents with a view to promote the extirpation of the small-pox. By John Milner Barry, M.D. Cork: Printed by M. Harris, Castle-street. 1800."

It is dedicated as follows:—

"To Dr. Longfield.

"Dear Sir,—If the inoculation of the cow-pock has already made some progress in this City, it is principally due to the early proof you gave of your belief in its efficacy, by the inoculation of your grandson. This is sufficient reason for dedicating the following pages to you; permit me, at the same time, to express publicly the deep sense I entertain of your personal kindness, and my admiration of the extent and variety of your philosophical and professional knowledge.—I have the honour to be, dear sir, your sincere, humble servant, J. M. Barry.

"Tuckey-street, Nov. 20, 1800."

The author concludes a paragraph, page 3, thus:—"If by the following account, in which the reports of the best writers have been confirmed by my own observations, I contribute to extend a medical practice which must, ultimately, banish from the earth a disease highly destructive to human happiness, I shall think myself sufficiently recompensed." Again, at page 15, he writes:—"The vaccine matter which I first used was sent me on a silk thread by Dr. Bradley, of London. On the 6th June, eight days after the infection had been taken in London, I inoculated six children by raising the skin with a lancet, and inserting a bit of the silk, which I then secured with a little sticking-plaister. In three the inoculation succeeded, from whence I procured an abundance of the infection, with which I inoculated a number of children in the city and its neighbourhood. Not long after I received a second thread from Dr. Pearson, physician to the Cow-Pock Institution in London; with this thread Dr. Sugrue inoculated several children at the north end of the town."

The following being of local interest, I am induced to copy in detail from the pamphlet, as when seen it cannot but interest some of the living relatives, and put them in possession of facts with relation to their ancestors, probably hitherto unknown to them:—

CASES OF PERSONS INOCULATED WITH VARIOLOUS MATTER, WITHOUT EFFECT, AFTER HAVING HAD THE COW-POCK.

1. R. Radcliffe, aged two years, } sons of Mr. Radcliffe,
2. J. Radcliffe, aged two months, } Henry-street.
3. — Supple, aged two years, daughter of Mr. Supple, Fishamble-lane.
4. Ann Notter, aged five months, daughter of Mr. Notter, St. Patrick's-street.
5. Peter Rearden, aged one and a-half years, son of Mr. Rearden, St. Patrick's-street.
6. William Kennedy, aged nineteen years, servant to the Rev. Giles Lee.
7. A Negro Girl, aged eighteen years, servant to Mr. Smith, Nile-street.
8. — Cowen, aged four months, daughter of Mr. Cowen, Attorney.
9. — Broughton, aged two years, son to Mr. Broughton, Nile-street.
10. Ellen Barry, aged two years, son to Mr. Barry, Mallow-lane.
11. Judith Herrick, aged six months, daughter to Mr. Herrick, Currahaly.
12. William Gregg, aged two years, son to Mr. Gregg, Attorney.
13. M. Campion, aged six months, daughter to Mr. Campion, Dromore.

Dr. Sugrue inoculated two children of Mr. Montjoy's, Kyrls-quay, and two of Mr. Hayes', North Main-street.

A paragraph, page 27, says:—"In pregnancy, the almost absolute certainty with which abortion follows the small-pox, and the consequent danger to life, have deterred practitioners from inoculating pregnant women; but even in the advanced stage of pregnancy women have been inoculated for the cow-pock with perfect safety to themselves and their offspring. Of this, I had myself one example. A woman six months gone with child, having the small-pox raging in the neighbourhood, as she had recent instances of its mortality in her own family, applied to me to be inoculated with the cow-pock; she took the infection, and passed through the disease without any accident—the symptoms proving as mild as possible.

On page 42 you may read—"The natural cow-pock was universally known among our farmers by the name of *shinach.*"

The pamphlet is a very interesting one, and now, after

seventy years' experience, proves the soundness of the author's views. I feel personally indebted to Dr. Barry for calling my attention to this pamphlet, a production of which, as a native of Cork, and the son of the author, he must feel naturally proud, and I don't wonder at his wish to guard it with jealous care. It may be found in a book of pamphlets printed by Edwards and Savage, Cork, 1821, and in the possession of the Royal Cork Institution. When now turning over its leaves, I find an article headed "Cow-pock," on page 20—no author's name—at foot of which I read the following paragraph:—"If there are any medical gentlemen in this town who continue still to entertain serious doubts on this subject [there are none in 1867], I verily believe they must arise from want of sufficient experience. To such gentlemen my friend Dr. Bullen, whose affection for his children is unquestionable, makes the following offer—Two of his children passed through the cow-pock some months since, whom he is prepared to submit to any ordeal these gentlemen may devise for communicating the small-pox to them." There is no date to this article. The offer was a bold one. The author must be Dr Barry.

Hospital Reports.

RICHMOND, WHITWORTH, AND HARDWICKE HOSPITALS.

Dr. LYONS'S CLINIQUE.

(Reported by Dr. Belcher.)

RHEUMATIC ARTHRITIS.

C. D., an unmarried female domestic servant, aged 28, was eight days an intern patient at the Whitworth Hospital at the date of this report (March 6th), and had been four days ill previously to her admission. Dr. Lyons considered her case to be one of rheumatic arthritis. At the date of this report her pulse was quiet; and the disease, which had been found to affect the wrists, knees, ancles, shoulders, and hips, had entirely subsided. The mode of treatment adopted by Dr. Lyons in this case is worthy of note; not because of any originality in the means employed, which are mostly well-known and popular remedies, but in their combination, and as illustrating the rationale of a plan at once useful and easy of application.

In the first instance the patient was encased in a flannel jacket with the view of keeping up an uniform temperature in the body, and with the same object the sheets were removed from the bed, and the patient was made to lie literally "between the blankets."

In the next place the affected joints were poulticed with a mash of chamomile flowers and poppy heads.

In the third place she took a quarter of a grain of opium every four hours; and, at the same time, she was ordered a combination of three salts of potass, half an ounce of the bicarbonate, and two drachms each of the nitrate and acetate, in seven ounces of infusion of calumba, and an ounce of tincture of gentian; half an ounce of this mixture every three hours.

The *rationale* of this treatment may be shortly explained thus: the bicarbonate saturates the uric acid, and makes a soluble salt, which is washed out of the system through the kidneys under the stimulus of the acetate and nitrate. The warm poultices give immediate and permanent ease, and retain the deposit in the joints until it is taken up in the soluble form, thus preventing any repellent action which, by metastasis, would tend to drive the inflammation to the heart. The opium procures sleep, and gives great relief from pain, the patients passing through the disease with little or no suffering.

This plan has been extensively used by Dr. Lyons, and with, as he conceives, the effect of speedy relief to the sufferings of the patients so treated; and also with the important effect of a very large proportionate immunity as regards the principal organ, the heart, less than one in twenty of such cases having presented cardiac complications. During the last twelve months Dr. Lyons has treated on this plan about twenty-five such cases in this hospital.

As regards the subject of the present report, it may further be stated that she got complete and permanent relief in six days after admission; and it may also be noted that at the time of her admission to hospital she had slight cardiac irritability, on account of which the method of treatment by anticipation was adopted, and two leeches were applied over the region of the heart, followed by poultices. This method had the desired result, and no trace of cardiac murmur is now audible.

STRUMOUS OPHTHALMIA, AND ENLARGED SPLEEN, SPLENIC MURMUR.

R. T., a boy aged 15, was admitted under the care of Dr. Lyons on the 30th January, 1867. He had then double strumous ophthalmia, but the principal feature in his case was an enormous enlargement of the spleen, which was readily perceptible on palpation, forward as far as the linea alba, and downwards as far as the crest of the ilium. In the course of a careful clinical examination, it was observed by Mr. G. Martyn, a pupil of Dr. Lyons, that there was a well marked *soft* souffle, audible over the splenic tumour, the cardiac sounds being at the same time perfectly normal, and devoid of all character of murmur. The murmur continues at the date of this report, (6th March), and has been recognised by many visitors to these wards. In Dr. Lyons's view, this case is interesting as affording a rare stethoscopic phenomenon, and, as he suggests, it may prove useful in establishing a diagnosis between enlarged spleen, and a tumour of any other kind occupying the situation of that organ.

As regards treatment, the patient has been taking cod liver oil, and also the syrup of the three phosphates which we brought before the profession last year in these reports, as recommended and used by Dr. Lyons, and which we are glad to find has been frequently noticed in favourable terms in various home, colonial, and foreign medical journals, since we had the pleasure to introduce it, and other remedies recommended, and in point of fact invented by this gentleman, to the notice of the profession. The chlorate of quina is another instance in point.

INCIPIENT PARALYSIS, AND SLOW SPEECH.

P. C., aged 33, a tavern waiter, of very intemperate habits, and who was more than once under treatment for delirium tremens, was under the care of Dr. Lyons at the Whitworth Hospital at the date of this report, (6th March). The patient stated that six months ago he fell in the street, and was carried home insensible, since that time he exhibited symptoms of a very slight amount of advancing cross paralysis. There was very slight traction of the right cheek to the left side, and perceptible, but very slight loss of muscular power in the left upper extremity, and left leg, which, as he says, "has a slight kick in it."

Dr. Lyons is of opinion that the lesion in this case is probably in the right hemisphere, and most probably in the corpus striatum. It will be interesting to follow the clinical history of a case presenting in its incipient condition the phenomena of ordinary paralysis.

The treatment was tonic, with half grain doses of nux vomica, thrice daily.

ST. GEORGE'S HOSPITAL.

EXTRACTS FROM A LECTURE BY DR. OGLE.

After dwelling upon the phenomena of "collapse," and alluding to the various affections in which it was wont to occur, Dr. Ogle instanced the two following cases as examples of extreme collapse accompanied by symptoms leading to the belief that the patients were suffering from cholera; of these two cases the first was particularly inter-

esting, in as much as it occurred at a period when cholera was beginning to increase in London, that is in the middle of last year, a circumstance which of course at the time lent great force to the suspicion that the patient was the subject of this malady.

DIARRHŒA AND VOMITING; ARREST OF THE FUNCTIONS OF THE KIDNEYS; SYMPTOMS OF COLLAPSE; ABSCESS IN THE PERINÆUM; EVACUATION OF PUS INTO THE BLADDER; STRICTURE OF THE URETHRA (DOUBLE); CONGESTION OF THE LUNGS AND KIDNEYS.

Case 1. The patient, a coachman aged 47, was admitted in June 5th last, under Mr. Tatum's care, with difficulty in passing the urine, and with a fluctuating swelling in the perinæum. For ten years he had suffered from stricture. The abscess was opened; ordinary diet and porter were given, and morphia at bed time. Ten days after admission the wound was quite healed, and a No. 5 gum catheter passed. Three days later a catheter could not be got into the bladder, and on the same day he had three or four rigors, followed by burning heat, and by a sleepless night. On the next day the tongue was dry and furred, the bowels relaxed, the respiration hurried, and the pulse hardly to be felt at the wrist. Hot brandy and water and strong beef-tea were given, and ten drops of the liquor opii sedative every four hours. In the afternoon of this day (the 20th) Dr. Ogle saw the patient with Mr. Tatum. No urine had been passed all day. There was hiccough, and the skin was covered by cold perspiration, the pulse was almost imperceptible, the breath diminished in temperature. Everything taken was vomited, and, in the evening, still no urine had been passed. The stools were yellow, slimy, and rather offensive. No pain was felt, but the patients general condition very much resembled that of a cholera patient. Hot bottles and mustard poultices were applied to the body, and ammonia, opium, and hydrocyanic acid given. On the 21st the face and extremities had become quite blue. The tongue was pale, coated with a yellowish brown fur, the pulse quite gone, and the heart's sounds inaudible. The mind occasionally wandered. The temperature of the body was very low. A gum catheter was passed, and about one oz. of purulent urine was drawn off. No urine had been passed voluntarily. In spite of brandy and æther, &c., he died in the afternoon of the same day.

On *post-mortem examination* the brain was found much congested with black blood, but otherwise it was healthy. The left lung was congested. The heart was uncontracted, containing black, fluid blood; the valves being blood-stained. The kidneys were congested, but otherwise healthy; as were the spleen and liver. The urinary bladder was much thickened, and the surrounding structure hypertrophied. In front of the prostate gland, and opening into the urethra, just at the neck of the bladder, was a large abscess; and the pus from this abscess had evidently run backwards into the bladder, which contained about two ounces of thick, laudable pus. In front of the membranous portion of the urethra was a tight stricture, admitting only a small director, and in front of this a false passage. Near the urethra was also another stricture. Excepting a small fibroplastic tumour in the walls of the stomach, this organ and the intestines were healthy. (See P.-M. B., 1854. No. 214.)

VOMITING AND DIARRHŒA: SYMPTOMS OF EXTREME COLLAPSE: PERFORATION OF THE STOMACH, &C.

Case 2.—Anne C., aged 21, was admitted July 26, 1854, in a very emaciated state, with constant vomiting, she had not menstruated for six months, and had had pleurisy nine weeks before admission. After her admission the sickness did not appear for some days, and then only occasionally, and about a quarter of an hour after food. On the 19th she had diarrhœa, and in the evening, when returning from the water-closet, she fell down in what was called a "fainting fit." Soon afterwards her face became dusky, and the features were pinched and sunken. She was quite pulseless. By the aid of stimulants she rallied at eight P.M., and took a scruple of calomel and had a mustard emetic, afterwards two grains of calomel were given every two hours, with a draught containing sulph. magn. and carb. soda. She was shortly afterwards taken with cramps, continued purging of rice water stools, and her face appeared of a livid hue. She sunk and died soon after mid-day on the 20th.

On post-mortem examination by Dr. Ogle, the nails of the hands were very livid; the lungs contained much frothy fluid, but were otherwise natural; the texture of the heart was very weak, and its right cavities and left auricle contained weak clotted blood; the left ventricle being empty and slightly contracted. The peritoneal surface of the bowels was pale; the inner surface of part of the ilium and duodenum was very vascular, and some of the intestinal glands, ilium, and colon were enlarged. The mesenteric glands were enlarged. The pyloric end of the stomach was congested, and its walls much thickened and hardened, and at one part presented a rounded ulcer, perforating its walls and only blocked up by an adherent fold of peritoneum (part of the omentum). On examining the thickened submucous tissue of the pylorus it was found *microscopically* to contain large quantities of coarse fibrous tissue mixed with fusiform elongated cells.

Dr. Ogle then referred to the following case which occurred in his out-patient practice, and is interesting, as presenting a phenomenon (hiccough) not often met with in cases of phthisis pulmonasis. Dr. Ogle suggested that the symptom might have been the result of adhesion of the lung to the diaphragm, by which in some way or other this muscle or some branches of the phronic nerve were irritated:

PERSISTENT AND PAINFUL HICCOUGHING; PHTHISIS PULMONALIS; VOMICA; PNEUMOTHORAX; ADHESION OF LUNG TO THE DIAPHRAGM.

Case 3.—The patient, a horse-breaker, Walter M., aged 24, came under Dr. Ogle's care as an out-patient, April 13th, 1866, suffering from distressing hiccough, which he had had for thirteen days, as he said, night and day; this had come on quite suddenly after drinking ale and porter, which he vomited. He stated that he had an attack of a like kind for one day and a night four or six years previously when at Abergavenny, and he was attended by Dr. Smythe for bronchitis. In the present attack he had managed to stay the hiccough for a period varying from a quarter of an hour to an hour at a time by taking a cup of hot tea, and on the day before admission for seven hours by some medicine which had been given to him. He was evidently very distressed from want of rest and sleep, and, moreover, was in an advanced stage of pulmonary consumption. He observed that the hiccough was "just wearing him out." His tongue was very furred, and he was feverish; an opium linctus was prescribed, and a powder containing bismuth and magnesia. It appeared that the hiccough went on for four days and then ceased. On the 20th Dr. Ogle made him an in-patient, and he was admitted under Dr. Fuller's care. He died May 2nd.

On post-mortem examination much tubercular matter was found in the lungs, and a vomica at the apex of the right one. Bands of recent lymph connected the lower part of the right lung to the diaphragm, as well as the thoracic parietes, and about from two to three pints of fluid existed at the bottom of the right pleural cavity, in which the lung lay quite collapsed; and above this the pleural cavity formed a sac in which air was contained which had escaped apparently from the vomica above-noted. (See P.-M. B., 1866. No. 134.)

PHYMOSIS.

Under the care of Mr. LEE.

[Reported by Mr. E. C. RING, Surgical Registrar.]

Thos. E., æt. 8, was admitted on June 26th, under the care of Mr. H. Lee, with phymosis, the prepuce being greatly distended, swollen, and lengthened; there was a good deal of pain. On July 3rd the swelling had greatly diminished, and there was an ulcerated crack on the under

surface of the penis, just in front of the scrotum. This soon became a fistulous opening, and the urine passed both through it and the meatus urinarius. On the 28th he was discharged for a time. He was re-admitted on August 16th, and on the 23rd the edges of the orifice were pared, and brought together from before backwards with silver sutures, the prepuce at the same time being slit up on the dorsal surface. A catheter was passed and tied in ; the urine escaped entirely through the instrument, which was withdrawn on the 9th of September, the wound having entirely healed, a perfect cure being thus effected.

Parliamentary Intelligence.

HOUSE OF COMMONS.

March 6th.

SANITARY STATE OF HOLYHEAD.

Mr. Walpole, in reply to Mr. O. Stanley, said that Dr. Buchanan's report of the sanitary state of Holyhead would be published in the Report of the Medical Department of the Privy Council, and need not, therefore, be printed separately.

CHOLERA.

In reply to Sir J. C. Jervoise, Mr. Walpole said he could not undertake to say whether Dr. Frankland's report on cholera-stuff (cholerine) was scientifically true. The Registrar-General had published it in his appendix to his Weekly Return, believing it to be a valuable document, emanating as it did from so high an authority as Dr. Frankland, and as tending to put the public on their guard in dealing with what were supposed to be cholera cases. He was not aware that the Government intended to introduce any Bill on the subject.

Sir J. C. Jervoise asked the Vice-President of the Committee of Council on Education whether his attention had been called to the report of the medical officer of the Privy Council, (1866), in which he states, pp. 39-40, the mode in which cholera-contagium is generated ; whether the discoverer has divulged his method of obtaining this deadly agent ; and, if not, why not ; and whether the annual report of the medical officer, which was not accessible to members till towards the end of July in the last, will be so at an early period of this session.

Mr. Corry said the statement referred to was not due to any single discoverer, but was the result of scientific investigation by many competent authorities. With regard to the annual report, a great deal of extra labour had been cast upon the medical officer by the cholera outbreak of last summer, and he could not, therefore, hold out the expectation that it would be presented much earlier than it was last year.

March 8th.

METROPOLITAN POOR BILL.

The House went into Committee on this Bill.

Clauses 1 to 4 were agreed to.

On Clause 5, relating to the provision of district asylums,

Mr. Mill objected that the management of every separate asylum should be under a separate body, and that every dispensary should be under a different management. He was in favour of the administration of the same kind of things, as far as possible, on a large scale. A central board would be more under the eyes of the public. With a central board in existence the duties of the vestries would be those of superintendence rather than of execution. Administrative duties were best developed by a single hand, which should be responsible, and, if possible, paid ; and the executive administration of the Poor-law Board should devolve on paid officers, who would be watched in the districts by the vestries, which would consist of ready-made critics superintending others with a vigilance with which they did not like others to superintend them. In this way an addition might be made to the provisions of this Bill for securing appropriate superintendents. The proposal to make the asylums medical schools, and thus to secure them the constant supervision of skilled persons, did the greatest credit to its author, and was a proof of high legislative capacity.

Mr. Hardy said that great difficulties existed in making an entire change in the present system. It was very different from organising an entirely new system. He had kept in view progress in those matters, but he thought it wise to proceed step by step. Dispensaries would remain in the hands of Boards of Guardians, who had not been objected to as administrators of out-door relief. The dispensaries would differ from the hospitals in being restricted to the relief of out-door poor, and for that reason he thought it prudent to leave them, as they were in Ireland, under the care of dispensary committees of the Board of Guardians. He was glad Mr. Mill approved making asylums medical schools, a plan which had been formerly adopted at Marylebone Workhouse, and had acted most beneficially in Ireland.

Mr. Villiers could not see any provision in the Bill for making a single board control all those asylums for the sick poor. He objected to the word "asylum," and suggested the substitution of "hospital," or the words, "places where the sick poor shall be relieved."

Sir H. Verney also objected to the term asylums.

Mr. Ayrton and Sir W. Ridley thought the word "asylum" as good as any other, and Mr. Alderman Lawrence thought it "a most unfortunate word."

Mr. Hardy would not say anything about the word "asylum." The object of the clause was to give the Poor-law Board the necessary powers to classify the whole order of paupers, and to that end it was essential that the words proposed to be omitted should be retained in the clause.

After a lengthened discussion on an amendment of Mr. Chambers, that all the managers should be elected, and which was negatived by a large majority,

Dr. Vanderbyl moved an amendment to the effect that the medical officers should be members of the Board, without power of voting.

Earl Grosvenor approved the amendment, which would do away with the necessity of medical officers, who were educated men, being compelled to knock their heels outside the Board-room while questions of interest to them, and in the discussion of which they were well qualified to take a part, were being considered within.

Colonel Hogg said the ratepayers could now, if they thought it desirable, elect medical men as guardians, and often did so ; and it would be adopting a new principle, and one which in his opinion would not work at all well, if the Committee agreed to the amendment. When questions were discussed in which the advice of the medical officer was advantageous, that officer was generally requested to appear before the Board and give his opinion, and if that course were not adopted on such occasions the guardians would fail to perform their duty.

Mr. Ayrton said it was often desirable to have the medical officer's opinion in writing for the guidance of the Board ; but if that officer became a member, even without the power of voting, he would not only be oftentimes placed in a false position, but his efficiency would frequently be destroyed.

Mr. Villiers thought that the presence of the medical officers on the Board would be of great advantage.

Dr. Brady approved the amendment.

Mr. Hankey thought that the attendance of medical officers at the Board would only be a waste of their time.

Mr. Hardy objected to the amendment, on the ground that it would place the medical men in a false position.

The amendment was then negatived without a division, and the clause was agreed to, and added to the Bill.

March 11th.

The debate on the Metropolitan Poor-law Bill was resumed.

Mr. Vanderbyl proposed in Clause 42, instead of the words "proper persons" for the dispensers of medicine, the

following: "Persons on the Medical Register or duly certified as competent under the provisions of the Pharmacy Act of 1852, or the Apothecaries' Act of 1815."

After some discussion, in which Dr. Brady, Mr. Gilpin, and others took part, the amendment, on the suggestion of Mr. HARDY, was withdrawn, the word "qualifications" being put a little lower down in the clause, the effect of which would be to bring the matter under the supervision of the Poor-law Board.

After a short conversation respecting Clause 43, the words "entitled to," instead of "in receipt of," were substituted.

On Clause 45, Mr. MILL suggested that Poor-law medical officers should not be in private practice, but devote their services entirely to the poor; and further suggested that the Colleges of Physicians and Surgeons, in conjunction with the Civil Service Commissioners, should frame a system of competitive examinations for the purpose of testing the fitness of Poor-law medical officers. Mr. Mill did not move an amendment.

Mr. HARDY did not think medical men could be got to undertake the duties of Poor-law officers without the option of private practice as well. In London, in some instances, practitioners had found private practice incompatible with their public duties, and have given it up. But, speaking generally, the salaries were so small that it would not be possible to obtain properly qualified men without private practice. He was not prepared to give his adhesion, at the present moment, to the system of competitive examinations.

Dr. BRADY opposed the competitive examinations, and eulogised the profession for their gratuitous services to the poor on all occasions.

On Clause 59, Mr. NEATE inquired what was the basis of compensation, if, for instance, the Board might appoint an indoor for an outdoor medical attendant.

Mr. MILL said the clause as it stood gave such power to the Board as left the present medical officer at the mercy or discretion of a single officer.

Mr. HARDY would retain the clause, which had been long before the house and no objection made to it. Compensation would be made in accordance with, and calculated upon, the terms of the contracts. There would be no difficulty at arriving at a right decision in any case.

On Clause 67, Earl GROSVENOR moved an amendment which would have had the effect of transferring to the common fund all expenses connected with providing the necessary asylums for the working of the Act.

Some discussion took place on the amendment, in which Mr. Ayrton, Mr. Hardy, Mr. Goschen, Mr. Locke, and Sir H. Verney took part. The amendment was lost on division by 35 to 97.

Sir H. VERNEY rose to move the addition to the clause, at page 14, after line 31, of the following words :—"For the maintenance in a sufficient number of duly regulated hospitals, and under the care of trained nurses, of the sick poor, together with the cost of training nurses."

After some discussion this amendment was negatived, as was one by Earl Grosvenor in section 2 to insert after "small-pox" "cancer and syphilis."

Mr. P. WYNDHAM moved the insertion after Clause 28 that "asylums be provided with hospital carriages of such a pattern as the Poor-law Board shall approve of for the conveyance of persons suffering from small-pox, fever, or other infectious disease."

Mr. G. HARDY said this was already provided for by the clause under the words "other conveniences."

The preamble of the Bill having been agreed to, it was ordered to be reported.

LONDON HOSPITAL.—On Wednesday evening, March 13th, a dinner was given at the London Tavern by the members of the Medical and Surgical Staff and the Resident Officers to Dr. James Jackson, the late Resident Medical Officer, who is about to leave for Australia. The chair was occupied by Mr. Little, and amongst those present we may mention—Drs. Hughlings Jackson, Morell Mackenzie, Sutton; Messrs. Couper, Rivington, James Adams, &c.

Reviews.

ST. GEORGE'S HOSPITAL REPORTS. Edited by JOHN W. OGLE, M.D., F.R.C.P., and TIMOTHY HOLMES, F.R.C.S. Vol. I. 1866. Pp. 444. London: Churchill and Sons.

IN imitation of the example set by Guy's Hospital, the medical staff of St. George's have issued the first volume of a series of reports which, it is contemplated, will be annually continued. The present volume promises well, and forms a handsome book, and that the arrangement and selection of the contents will be efficiently carried out is amply guaranteed by the names of the editors, Dr. Ogle and Mr. T. Holmes. The papers are twenty-two in number, and are almost entirely written by the medical staff of the hospital and the lecturers in the medical school. The work, we are told in the preface, was originally designed mainly as a means of registering the experience gained in the hospital, and independently of the papers, which, with one exception, are on practical medicine and surgery, there are complete reports by the medical and surgical registrars, relating the results of all the cases which have received treatment in the wards of the hospital during the course of the year 1865.

The first paper, which we have alluded to as offering an exception to the practical character exhibited by the rest, is, nevertheless, a very interesting one, being devoted to a compendious history of the St. George's Hospital and School, and not only the past and present pupils of the hospital will read the account with interest, but the whole profession will be gratified by tracing the gradual progress of the institution from its suburban and comparatively insignificant position a hundred years ago to its present permanent, spacious, and pretentious dimensions, which are, we understand, to be further extended in connexion with other improvements in the vicinity. The history of the school also, springing as it did from the indignant remonstrances of John Hunter against the neglect of some of his colleagues in not giving clinical instruction to the pupils, is a curious episode in the advancement of medicine and surgery; the struggles of a few of the medical staff, John Hunter among the first, having gradually overcome the opposition of their colleagues and the apathy of the governors, until the utility of medical teaching was, as it is now, fully recognized, and the means for its practical development were adequately but not yet liberally supplied.

The other papers, as we have before observed, are all of a practical character, and comprise contributions to the Surgery of the Head, by Mr. Prescott Hewett; a case of Meningocele in the Occipital Region, injected with Iodine, without ill consequences, by Mr. T. Holmes; Remarks on the Typhus Epidemic of 1864-5, as observed in St. George's Hospital, by Dr. R. E. Thompson; Remarks on Progressive Locomotor Ataxy, by Mr. J. Lockhart Clarke; some Observations on Cerebral Symptoms occurring in certain Affections of the Ear, by the late Mr. Toynbee; some Practical Details on Amputation at the Hip-joint, and on the Applicability of this Operation to some of the worst cases of Morbus Coxarius, by Mr. T. Holmes; a case of Disease of the Brain, illustrating the Cerebral Lesions resulting from Diabetes Mellitus, by Dr. J. W. Ogle; and others by Dr. Bence Jones, Mr. Brodhurst, Dr. Dickinson, Dr. W. Ogle, Mr. George Pollock, and Mr. E. Nayler.

THE ACTION OF MEDICINES IN THE SYSTEM. By FREDERICK WILLIAM HEADLAND, M.D., B.A., F.L.S. Fourth edition, revised and enlarged. Pp. 449. London: Churchill and Sons. 1867.

THIS work of Dr. Headland has gradually expanded from the dimensions of an essay, in which form it first appeared when it received the Fothergillian Medal of the Medical Society of London, into the goodly volume now before us; but the present edition, while it has been improved and amplified, has not been inconveniently enlarged, as compared with the last edition. Since the period of the publication of the original essay, what a multitude of observation has been made upon the action of medicines in general and in particular, is well known to those who are conversant with medical literature, and while, on the one hand, innumerable additions have been made to the catalogue of existing remedies, or supposed remedies, on the other hand the efficacy of most medicines has been in more than one influential quarter strenuously denied. As to these drugs again, the activity of which is undoubted, the most conflicting views have been advocated with regard to their *modus operandi*, and their efficacy in particular diseases. Amidst

such a diversity of opinion, and in the face of so much scepticism and of so much credulity, it is consolatory to turn to the pages of such books as that of Dr. Headland, where the real position of medicines is fairly stated, and their operation, either individually or in groups, is carefully defined. We can perhaps give no higher praise to Dr. Headland's volume than to state that it is a learned and thoughtful summary of the present state of therapeutics, and that it may be consulted with safety and advantage by all who would wish to make themselves acquainted with the present received views of the action of medicines on the human system.

ST. BARTHOLOMEW'S HOSPITAL REPORTS. Edited by Dr. EDWARDS and Mr. CALLENDER. Vol. II. Pp. 264. London: Longmans. 1866.

THE excellent plan of making the experience of our great hospitals available for the general information of the profession cannot be too highly commended or too liberally encouraged, and we are glad to perceive by the published lists of subscribers appended to each of the volumes of Hospital Reports hitherto presented, that the objects held in view by the promoters are liberally seconded by the former students of the respective institutions. The present volume of St. Bartholomew's Hospital Reports, although not so bulky as some of its rivals, contains a great variety of valuable materials, most of which, as is usual in such reports, are of a practical character, and are derived from the personal experience of the writers of the respective papers. The last article in the number consists of extracts from the Statistical Report of the Hospital for the year 1865, and contains a series of tables selected for republication from the Annual Report of the Registrars of the Hospital, Dr. Edwards and Mr. Willett. These tables show the whole number of medical and surgical cases received into the hospital during the year, the names of the diseases, the results, the mean duration in hospital, and other particulars; but the editors point particularly to some of the tables which show the number of cases of disease bred within the walls of the institution, thus adding unduly to the mortality. It should be mentioned, however, that all the cases of erysipelas, or fever, or pyæmia, returned as supervening upon other diseases, are not generated within the hospital, but many of the patients are charged with the disease on their admission, and it developes itself when they are recovering from the accident or injury for which they have been treated. Among the contributors of papers are to be found the names of most of the staff of the hospital, including Mr. Savory, Mr. Paget, Mr. Callender, Mr. Holmes Coote, Mr. Luther Holden, Dr. Edwards, Dr. Duckworth, and Dr. Farre.

PROPOSITION FOR A NEW REFORM BILL, TO FAIRLY REPRESENT THE INTERESTS OF THE PEOPLE. By W. F. STANLEY. London. 1867.

REFORM Bills do not lie much in our way, though we should gladly hail a bill which would admit of our profession being represented in Parliament. Mr. Stanley would not allow any one class to legislate for us all; and, moreover, he would have fifty members representing "learned societies," our profession included. We do not think it at all likely that Mr. Stanley's proposition will become law, this session at least.

PRACTICAL OBSERVATIONS ON THE INELLECTUAL, SANITARY, AND MEDICAL TREATMENT OF THE DEAF AND DUMB. By HENRY SAMUEL PURDON, M.D., &c. Belfast. Pp. 95. 8vo.

THERE is not any date prefixed to the publication of this tractate, which, judging from internal evidence, we should say was printed in 1866. It comprises an introduction, seven chapters, and a conclusion; and contains very much that is interesting, besides a large amount of statistical information of considerable value to our profession.

THE MODERN TREATMENT OF PNEUMONIA IN YOUNG CHILDREN, WITH SOME OBSERVATIONS ON THE INITIAL AUSCULTATORY SIGN OF THE DISEASE. By G. STEVENSON SMITH, L.R.C.S.E., &c. Pamphlet. Edinburgh: 1866.

THIS pamphlet is a reprint from the *Edinburgh Medical Journal* for November, 1866, in a notice of which periodical we duly mentioned the paper now before us.

Mr. Stevenson Smith treats simple uncomplicated pneumonia in the young child on much the same plan as that known in connexion with the name of Dr. Hughes Bennett; and, according to the statistics here furnished, with the same successful result. "Dr. Bennett," remarks the author, "has shown by statistics, the accuracy of which no amount of quibbling can affect, that in the adult, uncomplicated pneumonia, when treated according to what he calls the restorative plan, almost always ends in recovery."

CASES OF POSTURAL TREATMENT IN PROLAPSE OF THE FUNIS. By ROBERT DYCE, M.D., F.R.S., Edinburgh. Professor of Midwifery, Aberdeen. Pamphlet.

THIS pamphlet is a reprint from the *Medical Times and Gazette* of November, 1866, and is well worth the reading of obstetricians. The well-known name and position of Dr. Dyce is sufficient guarantee for the value of any paper bearing his name on its title-page.

LECTURES ON PUBLIC HEALTH. By E. D. MAPOTHER, M.D. Dublin: Fannin and Co. London: Longman and Co. 1867.

THESE lectures seem considerably enlarged in their re-issue, and we may say are almost entirely re-written. The author says in his preface that the first lecture is scarcely altered, but that the others which were included in the first edition, have been enlarged, and twelve new ones have been added. Dr. Mapother's views in bringing out a new edition of this really useful book, is to bring before the public his experience gained from the late visitation of cholera. Under these circumstances the book will be read with considerable interest.

The author commences with a review of the sanitary state of Dublin in 1864, the date when this book first appeared. He then proceeds to the consideration of air, including its impurities, and the principles of proper ventilation. From this subject we are led to consider food in its various phases, and then baths and clothing. Two chapters are devoted to sanitary architecture, viz.:—Hospitals, dwellings of the labouring classes, &c. Dr. Mapother is decidedly a well-read man upon the subject upon which he is writing; this fact is particularly evinced in this part of his own work, as few authorities or writers on his subject escape his notice.

The prevention of zymotic and constitutional diseases; the cholera in 1866; the cattle plague; disinfection, &c., are the subjects of additional lectures.

It is probably to lecture xviii. (one of some length) that the reader will look with much interest, as it is chiefly taken up with the consideration of the outbreak of 1866. There is no one more authorized to write upon this outbreak, as it occurred in the City of Dublin, and few who, with the most unremitting attention during its prevalence, would be able to gain such an insight into this mysterious disease as Dr. Mapother. That gentleman is a contagionist, he says:—"I will use the words 'contagious' and 'infectious,' in no limited sense relating to touch or air alone, but as synonomous with 'communicable,' or the familiar word catching."

"The Contagiousness or non-contagiousness of cholera has been warmly debated since that disease left 'its home' in 1817. The ablest men in our profession have been ranged on one side or the other, and victory seems to have vibrated between the disputants.

"In 1832 all were contagionists; in 1849 nearly all held the contrary opinion, and after 1866 a medium view will be established."

No one who reads Dr. Mapother's graphic account, or has had any practical experience himself, can hold very opposite views from those expressed in this chapter. Each unfortunate return of the epidemic makes us better acquainted with its modes of extension, even if no better knowledge is gained.

The latter part of the work is taken up with legislature enactments bearing upon hygiene, and contains some useful suggestions.

Although these lectures are addressed to a medical body (*i.e.*, they were delivered at the Royal College of Surgeons), they are written in a popular form, Dr. Mapother having adopted the style so freely made use of by Dr. Lankaster, Professor Johnston, and a few others. By such means the author constructs a book which, although ostensibly written for the scientific man, will, no doubt, be largely bought by the ordinary reading public. Some of the illustrations might be better; indeed, we think, that in any future edition this book is too good not to appear in a better dress.

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The Medical Press and Circular.

"SALUS POPULI SUPREMA LEX."

WEDNESDAY, MARCH 20, 1867.

NEW POOR-LAW BILL FOR LONDON.

Mr. Gathorne Hardy's first appearance as a Poor-law Reformer has been eminently successful, for his Metropolitan Poor Bill has passed through all its stages in the House of Commons, and by the time that our journal is published, it may possibly have become the law of the land. But whether this be so or not, it is evident that the measure has been received with general satisfaction, and its ultimate adoption may be looked for with certainty.

It is satisfactory to find that the public and the House of Commons have not been alarmed by the bugbear of centralization, and thereby induced to obstruct the Bill in consequence of the power which it is proposed to transfer from the local guardians to the Poor-law Board. It has been shown repeatedly that the local guardians, however respectable they may be in a private capacity, are totally unable to regulate the management of the sick poor nominally intrusted to their charge; and that harshness to the unhappy patients and ill-treatment of the Medical Officers are the rule rather than the exception in Parish and Union government. The whole energy of the guardians and trustees has been expended upon the labour of reducing the rates, and the cruel plan has been consistently pursued of jumbling together under one roof, and often in the same wards, the sick and the healthy, the dirty and the clean, the sane and the lunatic; and all the efforts of the Medical Officers to improve the condition of the sick and infirm have been met with apathy, obstruction, opposition, insult, or dismissal. The Poor-law Board itself has a heavy incrimination of its own negligence to answer at the bar of public opinion; it has to explain why its well-paid inspectors have flagrantly neglected their duty, and *(lucus a non lucendo)* have thought that they are best discharging their functions by shutting their eyes to the abuses which they witnessed. We have asserted, and we re-assert, that the Board knew perfectly well of many of the atrocities, in the way of mismanagement of the sick poor, which were committed by the local guardians; but on the principle of *quieta non movere,* and because the Medical Profession and the helpless patients had no representatives in the House of Commons, the records of cruelty, negligence, and wrong were allowed to slumber in the desks of Gwydyr Houses, where they now remain, unless they have been destroyed by the officials.

We may here observe that in the progress of the present measure through the House of Commons, no secret has been made of the intention of the Government to increase enormously the power and influence and patronage of the Poor-law Board, but such is the horror entertained and expressed by all classes of the community at the recent revelations of Poor-law mismanagement, that like the story of the frogs in the fable demanding a king, the tyranny of the Central Board is welcomed with acclamation as a relief from the King Logs and the Bumbles who have hitherto governed the friendless sick paupers. The scheme of erecting the new asylums for lunatics, small-pox cases, and fever cases, will throw great patronage and influence into the hands of the Board, which will have the power to declare the metropolis to be a single district, and will, without doubt, exercise that power, and thereby take upon itself the whole management of the new buildings. An amendment proposed by Mr. Mill (who, by the way, notwithstanding the ventilation of some crotchetty notions, has shown himself well versed in Poor-law matters and favourably disposed towards the Poor-law Medical Officers) was to the effect that these Asylums should be administered by a Central Board under the local supervision of the Vestries, but it was very properly rejected, as in the event of its passing, all the old abuses would to a certainty have recurred. As it has been very truly said, the Poor-law Board, objectionable as its proceedings are in many respects, is at any rate responsible to the public and to Parliament, while the local Boards are practically responsible only to the petty shop-keeping and public-house cliques by whom they are elected, and the same system of jobbery which has lately excited so much indignation, would be perpetuated instead of being repressed, if these small coteries were allowed to control the central power.

With regard to the expenses of maintaining the lunatics, the small-pox patients, and the fever patients, who, it will be remembered are all to be collected into the contemplated new asylums, the charges will be defrayed by the whole metropolis, and not as heretofore, by the respective parishes or Unions. This is an instance of getting in, not the thin edge of the wedge, but a considerably larger portion of the instrument into the prospective machinery, for it is an important stride towards the complete classification of all the sick, disabled, and infirm poor throughout the metropolis, and the

ulterior intentions are not by any means concealed, but openly announced on the part of the Poor-law Board. Although for the present, it is not contemplated to erect buildings for the reception of cancerous and syphilitic cases, and a proposition to that effect, made by Lord GROSVENOR, was rejected, yet it is intimated that eventually further subdivisions and arrangements will be carried out, until probably at last the sick will be entirely separated from the able-bodied, and thus a wide scheme of classification of all sick paupers will be carried into execution, and a series of Hospitals, each containing their respective groups of patients, will be instituted. It is almost needless to remark that such a design is a most praiseworthy one, and its accomplishment would tend not only to our improvement in the condition of the sick poor, but to the advancement of medical science.

THE OBSTETRICAL SOCIETY OF LONDON.

THE Fellows of this Society have received a circular in reference to the determination of the Council anent their attempt to expel Mr. BROWN, which promises that the "published matters" referred to in the resolution we printed last week, will be forwarded "with the utmost possible despatch." As the matter is of the very utmost importance, not only to Fellows of the Society, but to the profession generally, we here reprint the notice :—

"53, Berners-street, March 11th, 1867.

"DEAR SIR,—We are directed by the President and Council to inform you that, in accordance with Law iv., section 2, the next meeting of the Obstetrical Society, on April 3rd, will be made special, for the purpose of considering and voting by ballot upon the following resolution of the Council, as notified to the Society at its ordinary meeting, held on the 6th inst. :—

"'That, in the opinion of the Council, the published matters in relation to the performance of clitoridectomy by Mr. I. Baker Brown, justify the Council in recommending the Society to put in force against him Law iv., section 2, which provides for the expulsion of a Fellow.'

"We are directed to inform you that the published matters referred to in the above resolution will be forwarded to you with the utmost possible despatch.

"The next meeting being special for the consideration of particular business, no other business will be transacted, and visitors cannot be admitted.

"We are, dear sir, yours obediently,
"G. C. P. MURRAY, M.D. } Hon. Secs."
"HENRY GERVIS, M.D. }

We have to ask particular attention to the intimation that no visitors will be admitted. Now, although to some extent it may be argued that this matter is private, and concerns first of all the Society, we must observe that the honour and reputation of every individual member of our profession is at stake. The Council has taken the gravest proceeding against an individual, and although visitors could not expect to vote on such an occasion, their exclusion looks as if there were something to be gained by secrecy. Mr. BROWN has been publicly accused, and he should be permitted as publicly to defend himself. The whole profession has been informed of one part of the proceedings—Why not of the whole? What confidence can be expected to be placed in a ballot conducted thus secretly? What respect can be claimed for a trial thus enshrouded in mystery? What is required is an impartial investigation into the charges which the Council of the Society lays against Mr. BROWN. This can never be effected in secret. Rather than exclude visitors altogether, we should recommend the Council, for the sake of its own reputation, to throw open the doors to all, and to engage first-class shorthand writers to take a verbatim report of the proceedings, which report should be published in their transactions in full.

We commented last week on the impropriety of the journalist expressing an opinion on a case *sub judice*. We repeat our protest. In a question of this kind all other matters ought to be eliminated from the discussion, and any attempt to bias the Fellows by public comments is to be condemned as unjust, uncalled for, and utterly at variance with the understood practice of journalism.

One other point requires notice. At the last meeting a full debate was prevented by announcing that every opportunity would be given at the forthcoming meeting for free discussion. We are, consequently, not a little astonished to hear in various directions the opinion expressed that every Fellow ought to go to the meeting prepared to vote one way or the other on the strength of his opinion about the "published matters," which, we suppose, may be in his hand to-day or to-morrow. This is to argue that the jury ought to be called upon for a verdict after the case for the prosecution is completed. Englishmen have long been accustomed to hear the defence before pronouncing, and we trust this most necessary practice will not be departed from. The Council of the London Obstetrical Society has no right to pillory an individual and assign reasons afterwards; still less has the Society at large any right to pretend to the exercise of judicial functions, and having arraigned one of their number, leave him to the tender mercies of his accusers.

Notes on Current Topics.

THE NEW PHARMACOPŒIA.—It is reported, with every appearance of authority, that the British Pharmacopœia, to which we have already directed attention, will not be finally published until after the meeting of the Medical Council. We sincerely trust that no unnecessary delay will take place. If the Members of the Council propose to revise the work of their Committee throughout, another summer will have passed away before the book can be in the hands of the profession. After all the delay and annoyance that has been experienced, let us have no more useless procrastination. Any two or three gentlemen would have revised the last edition in a few weeks. Here we have been in a state of uncertainty all this time, and now seem as far from the goal as ever.

METROPOLITAN POOR BILL.—Mr. Hardy's excellent measure, to which we recently drew attention, has passed the House of Commons. Its provisions have given almost universal satisfaction, so that it is not unlikely it may escape the many dangers which threaten the Government, and in due course become law. We must, however, protest against the idea that this Bill is so complete as some of our contemporaries would represent. Inasmuch as it will discriminate between the sick and the healthy pauper, and will provide for the separation of lunatics and cases of contagious diseases from other inmates, it will be a boon to the community. The establishment of dispensaries is

The Health of the Princess of Wales.—It is not at all surprising that the condition of Her Royal Highness the Princess of Wales should have given rise, especially in non-medical quarters, to a great amount of anxiety, and that the causes and nature of her prolonged indisposition should have been misapprehended, and its consequences regarded in a more unfavourable light than the circumstances strictly justify. Without pretending to possess more information on this very interesting subject than our medical contemporaries, we believe that we possess quite as much; and we believe the facts are, that about a week since very great anxiety did prevail as to the state of Her Royal Highness, although this anxiety was not shared by her medical attendants. The medical consultations were held three times a-day. Dr. Arthur Farre slept at Marlborough House every night, and we believe that the subcutaneous injection of morphia was had recourse to in order to allay the severe pain experienced by the Royal sufferer. All these circumstances, although quite consistent with the fact that no danger to life ever existed, were quite sufficient to excite the attention of the non-medical attendants of Her Royal Highness, and from some of them, no doubt, the statements which appeared in some of the daily journals were derived. We have no reason to doubt what we have all along believed—namely, that the attack has been one of acute rheumatism, a disease which, under the most favourable circumstances, requires a considerable period of time to run its course; but, on the other hand, allowance must be made for the fears and apprehensions of those who perhaps witness the sufferings which they deplore, and who, being probably unacquainted with the natural history of disease, attach more importance to the existence of pain and the continuance of sleeplessness than those symptoms deserve in a pathological sense. There is no disease, as medical men well know, so painful as acute rheumatism, whatever joint it may attack, but there are also few serious diseases in which the prognosis is so hopeful.

Metropolitan Traffic.—Hardly a day passes in which there is not some serious annoyance, or some danger threatening life or limb occasioned by the overcrowded state of the main thoroughfares of London. No one familiar with the city can have failed to remark this, if he has not himself been variously endangered. The daily papers are constantly reporting accidents, as well as interruptions in the despatch of business arising solely from this cause; and, it might justly be surmised, that unless something were done the evil would necessarily go on augmenting year by year with the increase of the population. The Bill, therefore, for the regulation of metropolitan traffic, which has just passed through a select committee of the lords, has not been introduced a moment too soon. Some striking statistics of the accidents occasioned by the present condition of locomotion in London were presented to the House by Lord Belmore in moving the second reading of that bill: "In the space of fourteen months, between January, 1865, and March, 1866, no fewer than 180 persons were killed outright, and 2175 more or less injured by carriage accidents in the streets of the capital." It is to be hoped that the bill, if it cannot entirely prevent casualties of this kind, may at all events lessen the evil, and prove a remedy to a great extent for the nuisances arising from the indiscriminate overcrowding of our public thoroughfares.

Provincial Hospitals.—The course of enquiries forced upon us by the investigations at Southampton, on which we have already commented, make it evident that many of our provincial infirmaries are in a most unsatisfactory condition. The position and privileges of the staff at such an institution are frequently ill-defined, uncertain, and likely to originate jealousies with other medical men. Our profession is sometimes called quarrelsome, but it redounds to the credit of not a few of our provincial brethren that they have been able to live in harmony with all around them under a system likely to produce such bickerings as have occurred in other places under similar circumstances.

Cholera Stuff.—The questions asked in parliament by Sir James Jervoise in refernce to the weekly reports of the registrar general, seemed to imply that the honourable member must have misunderstood these reports. We gave so much consideration to the subject at the time, that it is not necessary to recur to it. In reference to the enquiry as to the intention to introduce a measure tending to obviate the loss consequent on any theory of infection, which was answered by Mr. Walpole in the negative, the registrar general in his last report remarks, "should any measure ever be introduced, it must be so extended as to obviate such losses, both of life and property as have been sustained by the people of East London. The principle of compensation applied to the accidents of railway companies may probably admit of useful extension to fatal accidents of another kind."

The Marylebone Workhouse.—Some short time since the borough members, and some of the principal inhabitants, assembled in the Board-room for the purpose of presenting testimonials to Dr. Randal, the Medical Officer of the Workhouse, and to Mr. Fuller, the Assistant Medical Officer, in recognition of their services at the late ice accident in Regent's Park. A silver candalabrum and two silver salvers, with suitable inscriptions, were presented to the former gentleman, and a handsome gold watch to the latter. The master of the workhouse, Mr. Douglas, was also presented with a purse containing £120, and a testimonial on vellum, as a public acknowledgment of his own and his wife's carefulness, kindness, and promptitude, at the time of that lamentable occurrence. The guardians have also made an addition of £50 per annum, to the joint salaries of Mr. and Mrs. Douglas, in consequence of these services, as well as of their generally intelligent and humane treatment of all classes of poor in this district.

The Sanitary Condition of the East of London.—The Medical Officer of Health for the District of Whitechapel, Mr. John Liddle, has just presented his annual report on the sanitary condition of that district for the year 1866, and from the circumstance that the visitation of cholera was more severely felt in this portion of the metropolis last year than in any other locality, the brief document will command a great amount of public attention. It tells us that the deaths for the year are greatly in excess of any year since 1848; that in 1849, when a severe epidemic of cholera prevailed in London, the total deaths in the Whitechapel district were 2778 in a population of 71,879, and that in 1866, in an estimated population of about 78,000, the number of deaths was 3492. In 1866 the death-rate of the district was 4·45 per cent., while in 1849 it was only 3·86 per cent. In both of these years the deaths

undoubtedly a step in the right direction, since nothing can be more improper than for the medical adviser to supply the drugs he may consider appropriate at his own expense. Giving the Poor-law Board "extra eyes" on the doings of the local authorities is the natural result of the recent revelations, so that the public have eagerly caught at the proposal to place nominees of the Poor-law Board upon the local Boards. Again, the transfer of certain charges to the common fund could not but be supported by those who have been agitating for an equalisation of the poor-rates. The measure is, therefore, possessed, amongst other excellencies, with the very important one of being so skillfully contrived as to be likely to win to itself a large number of supporters from various sections of the community. This is of considerable importance as to its probability of passing. In many points it is but the insertion of the thin end of the wedge, and should it become law we shall soon see its expansive nature. We sincerely hope that it may be indeed the commencement of a better era. It is because a larger measure might have failed that we welcome this. Founded, as it essentially is, on the system that has worked tolerably well in Ireland, we look forward to the time when the Poor-law of the whole United Kingdom shall be placed on a satisfactory basis. Nevertheless, we cannot conceal from ourselves that the medical element, neither in Ireland nor in the proposed metropolitan system, has assigned to it the preponderance to which it may justly lay claim. Dr. Vanderbyl, Member for Bridgewater, made some useful suggestions in his place in Parliament. Were doctors only as numerous as lawyers are in the House, we should not in this 1867 be dealing with the question. To the profession is to be attributed the fact that the public is determined to deal with the subject at all. Let us be as true to ourselves as we have been to the poor, and we shall force the Government to deal differently with us. It is not the wish of the public to treat the profession badly, and unless justice be done we must no longer plead our cause before legislators, but carry it, as we have done that of the suffering poor, to the supreme tribunal of public opinion.

Amendment of the Medical Act.—It is stated that the present Home Secretary is disposed to assist the Medical Council in passing an amendment to their "Act." We doubt, however, whether that body is likely to propose anything that will give general satisfaction to the profession. Strangely enough we adopt a system of protection, but refuse to appoint efficient instruments to carry out that policy. Either the public want protection or they do not; but under the "Act," which was proclaimed in 1858 to be thoroughly efficient, quackery is as rampant as ever. The cumbrous machinery carried out by the nominees of the "vested interests" has given us a "Register" and a Pharmacopœia, the necessary revision of which is not yet complete. The mountain still labours. We await the result.

The Director-General of the Medical Department.—Dr. Logan is to succeed to this important office. We have refrained from entering into any discussion respecting his merits compared with those of the eminent gentleman whose name has been put forward by some as a sort of competitor. It was not denied by any one that either would make an efficient public servant, and we can scarcely consider it the province of the medical journalist to attempt in such a case to sway the opinion of those who have the appointment, by raising a prejudice against an individual worthy of all honour, or by seeking to promote the interests of a personal friend. Where some principle dear to the profession is at stake, we shall never hesitate to enforce our views by all the arguments at our command, but we feel convinced that perpetual meddling in matters of little moment, and in which we have virtually no control, is not calculated to increase our influence with those whose support is most worth having. Dr. Logan brings to his office large experience and great popularity. The position to which he succeeds is one of great responsibility. It will be a proud boast for him should he be able to wrench from reluctant authorities that justice for his subordinates which is due to the medical profession. We trust he will remember what will be expected of him, and achieve for the medical department those concessions which it has so long demanded. Here is an opportunity for distinction that more highly-placed officials might envy.

Local Anæsthesia in Veterinary Practice.—On Tuesday the 12th inst., Dr. Richardson demonstrated his method of producing local anæsthesia before the Royal Society, for the prevention of cruelty to animals, and very ably pointed out the practicability of his process in veterinary surgery. There were present at the meeting—the Earl of Harrowby, in the chair; Mr. John J. Briscoe, M.P., Mr. W. Mackinnon, M.P., Mr. S. Gurney, M.P., General Sir John Scott Lillie, Dr. Fraser, Dr. Sedgwick, Professor Tuson, and a large attendance of members. It was stated a single pound of ether worth 4s. 6d. would suffice for twenty operations. Clearly, therefore, expense is not likely to prove an obstacle to its general employment, and there is no difficulty whatever n producing the insensibility. By Dr. Richardson's simple method an uneducated person affords the assistance the operator needs. The society will print Dr. Richardson's paper for general circulation, and they can scarcely expend their funds in a more practical way.

Special Wards or Special Hospitals.—In the campaign that has been carried on so energetically against special hospitals little has been said of their origin except in the most offensive manner. We have been making an investigation into some of these institutions, and shall recur to the subject shortly. We must, however, notice that it has recently transpired that St. Bartholomew's is about to create special departments. More than this, the gentlemen appointed to them are not to be members of the present staff. This liberal step we hope to see universally imitated. It is undeniable that not a few special hospitals owe their existence to the absence of efficient departments. Where these have been organized, in some instances they have been confided to the care of men already having a place at the institution. Much discontent is thus naturally produced. Able and conscientious men are excluded from appointments in the general hospitals, and are driven to the smaller institutions which they would gladly relinquish, did not they feel that the illiberal system frequently pursued prevents them from becoming attached to the hospitals they most desire. This monopoly produces incalculable evils wherever it exists, while, where the liberal system has been tried and the staff enlarged, the greatest benefit has accrued. We commend this fact to the hospital authorities where changes are contemplated, and urge upon them the liberal course as the most beneficial to the charities over which they preside.

in the London Hospital are included. These very striking statistics are well calculated to attract the notice not only of the local authorities, but of the conservators of the public health throughout the metropolitan districts, and it is to be regretted that the force of the cholera epidemic should have fallen with such deadly severity upon a district so densely peopled, but at the same time so poor (owing to the great preponderance of the indigent classes), and therefore so little able to meet any extraordinary expenditure in the way of sanitary supervision and medical attendance. The facts thus disclosed almost seem to warrant a general instead of a local taxation, when wealthy and salubrious districts escape the visitation which falls almost exclusively on the poor ones. The London Hospital, as being situated in the Whitechapel district, is noticed in the report as returning a large number of deaths from pyæmia, and the Medical Officer of Health considers the frequency of this disease in the hospital to be a matter calling for the serious attention, not only of the medical staff, but also of the governing body of the institution. He thinks that in order to improve the sanitary condition of the hospital, and to obviate, if possible, the recurrence of endemic disease, a report should be prepared by the whole of the medical staff, pointing out any sanitary defects, if they can be found to exist, and the means of providing for their removal. We should state, however, that the London Hospital is by no means singular in presenting a number of cases of pyæmia, erysipelas, diffuse cellulitis, and other diseases bred within the walls, or at least propagated from patient to patient, and probably most, if not all, the great hospitals in London are liable to the same observation. The last volume of St. Bartholomew's Hospital Reports distinctly announces that such a state of things exists in that establishment, and the circumstance is specially referred to by the editors of the volume.

THE LATE OUTBREAK OF CHOLERA AT NEEMUCH.—The literature of cholera treatment is enriched by an admirable report on the epidemic as it affected the 45th Foot, from the pen of Assistant-Surgeon T. W. Martin. This report will be found in the last volume of the Statistical, Sanitary, and Medical Report of the Army Medical Department. Dr. Martin's report is succint and complete in every particular, giving in a lucid form every information on the point bearing either on the causes, progress, or result of the epidemic. This report is worthy of the very high terms in which it has been spoken of by Professor Maclean of Netley, and may serve as a model for similar valuable contributions. The details of the report are such as to be unsuited for transference to our columns, but are well worthy of noting by cholera students.

Legal Intelligence.

WESTERN CIRCUIT.

EXETER, MARCH 12.

CROWN COURT.—(Before Mr. Justice BYLES.)

George Lee was indicted, for that he, being an attendant in the Devon Lunatic Asylum, did assault and ill-treat Frederick Lockyer, being a patient in the asylum, on the 9th of January. There were other counts varying the charge.

Mr. Lopes conducted the case for the prosecution; and Mr. Collins defended the prisoner.

In this case, from its peculiarity and importance, we detail the evidence.

We may state that before the lunatics were sworn the Judge asked them if they were aware of the nature of an oath, and they fully answered the question, and then gave their evidence much better than most sane witnesses.

G. J. Saunders—I am the medical superintendent of the county asylum. Frederick Lockyer came there in March, 1861; he has been there four times for mania. On the 9th of January I went to No. 3 ward and found Lockyer in bed. I gave orders for him to be stripped. I examined his breast and found a bruise six inches in circumference and three ribs broken; there was a severe injury to the left eye, caused by some weapon entering the eye; there was great pain, and he could not bear the light. It might have been inflicted by the shutter pole. The prisoner was on duty that morning in that ward.

Cross-examined—A shutter pole or the brush might have caused the injury. I have charge of the lunatics. Lockyer was a noisy, troublesome patient, not violent. He had been for twelve months in the refractory ward. Stoneman was assistant-attendant under the prisoner. About fifty patients slept in that ward. Lockyer's delusion was that he was workman to the devil; he lost it within a few days; he had periods of excitement without delusions. He was capable of giving an account of what took place before his eyes. He has given rational accounts of things.

Frederick Lockyer, by the JUDGE—I am 54. I know the nature of an oath.

By Mr. Lopes.—I am in the lunatic asylum. Early in January I was in my bedroom. The prisoner was head keeper. Stoneman came in. After that the prisoner came. I told my pitiful tale to him, thinking he would lean on my side. He said, "You have wetted your bed, have you?" He said he should take none of my abuse, and he took the brush and he pushed it in my eye, and he then struck me right and left on the head with his fist. I stood up to him and said, "Come on my son;" and I gave him a couple. Stoneman came up with a pole, and I thought I had better drop this game, seeing two of them. The prisoner struck me several blows. I called "Murder," and some people came, and then the game was stopped. My ribs were broken, and I am blind in one eye from the usage.

Cross-examined—I have kept account of the day, being the 9th of January. I told the magistrates so. Stoneman came in first that morning. I said, "Tom, you are in a bad temper." "Yes, I am," he said, "and that you'll ——— soon find;" and I thought it was time to be off, and I ran out. He struck me about a dozen times with a pole; he rammed it into me and broke my ribs. I did not strike him. He drove me into the day-room. I was not a bit excited. I was mild as milk. I can let my temper rise and fall. I went for my clothes, and after that it was I gave Lee two blows. The blood flowed about a bit. I think I gave him two good ones. I did not tell Stoneman I would not get out of bed.

Re-examined—I did not strike Lee till he struck me. Stoneman had tanned me well before.

George Chaplin—I know the nature of an oath. I am in the lunatic asylum, speaking conventionally, when I am not here or elsewhere. I was in my bedroom at six that morning. My room adjoins Lockyer's. Stoneman came up and entered Lockyer's room with the pole in his hand. I heard Lee say to Stoneman, "What! has he wetted the bed again?" and Lockyer spoke in an insulting manner, and he gave him a gentle push with the brush. Lockyer caught hold of the foot of the brush and there was a violent struggle; in pulling it the stubble came into the eye of Lockyer. Lee regained possession of the brush, which he threw down, when Lockyer attempted to strike him. Lee then struck several blows on Lockyer's abdomen, who then cried, "Oh, my Savour, save me!" I have a great abhorrence of anything filthy, and said, "That serves you right, Lockyer."

Cross-examined—If being jovial and full of mirth and has his whim, he is well enough, but when he is wrathed he is a devil untied. He became violent. I did not observe any blood on Lee's face at the time. It appeared to me in an hour after that Lee sympathized with Lockyer and was sorry for what he had done.

John Bowden—I am head attendant at the asylum. I was there at six that morning. I saw the blood on Lockyer's face and eye. I went to Lee, who told me that Lockyer had fallen foul of him and struck him three times. I made a report to Mr. Richardson.

Cross-examined—Lockyer was much excited at times; he had been placed in the refractory ward. He was troublesome, but not dangerous.

J. P. Richards—I am assistant medical officer. I examined his eye, which was much swollen from a recent blow.

Mr Collins addressed the jury for the prisoner. He had borne an excellent character. Did the prisoner or Stoneman commit these injuries? The witnesses to-day were sane, to-morrow they might be raving lunatics. What might they not have been on the 9th of January? All said that Lockyer was a quarrelsome, troublesome patient. These unfortunate men could assume almost anything. If he had touched upon Lockyer's delusion what a scene there might have been in court. If they were so completely sane, would they be kept in the asylum? Could they doubt that these unhappy men had talked over this matter? Could they doubt that it was Stoneman, and not the prisoner, who had caused the injury? Could they place dependence upon what these men said, when to-morrow they might give a totally different version of the affair? In a lunatic asylum the keepers were bound to keep the patients under proper restraint, and Lee was only doing his duty.

The learned Judge summed up. The prosecution was a most proper one. They would take care and protect these unfortunate persons from violence by their keepers, but they would not convict those having charge of them unless the evidence justified it.

The jury returned a verdict of not guilty.

John Stoneman was indicted for that he, being an attendant in the Devon Lunatic Asylum, did beat and ill-treat Frederick Lockyer on the 9th of January. Other counts varied the charge.

The prisoner said he had retained Mr. Carter to defend him immediately after the occurrence, and he hoped his lordship would postpone the trial until Mr. Carter came into court.

The Judge said he was sorry for it, but he could not help it, as he had no other case to go on with. (Mr. Carter was engaged at the Guildhall before Mr. Prideaux, Q.C., who was trying city prisoners there, and had sent up his brief to Mr. Folkard.)

Mr. Lopes appeared for the prosecution, and Mr. Folkard defended the prisoner.

The evidence was the same as was given in the last case.

Frederick Lockyer swore that the prisoner had rammed the pole into his ribs.

In his cross-examination he said he thought that the prisoner was not quite right; he thought it would be a good thing for them to change places. He thought the patients had more sense than the keepers. He had been a coachman, and had a very good character, and hoped to get another situation. He was in the refactory ward by choice, because he liked the people there. He was a good tempered fellow, unless he was put upon.

Mr. Folkard addressed the jury for the prisoner. The only evidence against the prisoner was an admitted confirmed lunatic, without the slightest corroboration. The story altogether was a most improbable one.

The jury *acquitted* the prisoner.

The Judge told the prisoner to be careful for the future.

Correspondence.

ON NATURAL AND ARTIFICIAL ELECTRICITIES AS THERAPEUTIC AGENTS.

TO THE EDITOR OF THE MEDICAL PRESS AND CIRCULAR.

DEAR SIR,—In my first letter of February 22, I premised that there are two kinds of electricity—the natural and artificial. I will proceed, with your permission, to consider the first of these two, and to show how that electricity is generated in the human body by fixed and immutable laws.

It is now a fact, recognized upon scientific data, that no decomposition takes place in the physical world (whatsoever may be the element) without the action of that species of electricity which exists, first, in the bowels of the earth, and therein decomposes the various elements which are destined to the formation and nutrition of every kind of plant. Without this we should have no vegetable kingdom, and, consequently, no animal life. This first and indispensable principle is the very starting point of all that exists.

That electricity is produced by chemical decomposition, and this decomposition is the great universal phenomenon, without which the world would remain uninhabitable, an inert and unchangeable chaos.

To this form of electricity I have given the name of "chemic," as being the result of chemical decomposition, as perpetually acting upon all chemical compounds and vivifying all that is animate on our globe. The above incontrovertible fact is the key which unlocks the door of all the physical arcana of nature. Starting, then, from this fact, I make the following deduction :—

If fermentation or decomposition evolve electricity, is it not philosophically correct to ask, whether the living body is not itself a decomposing machine?

If so, as a matter of course, that kind of electricity is generated in the body for a wise and useful purpose, as all and everything else is which emanates from the hands of God. This electricity possesses a double character and action of cause and effect, and effect and cause. That is to say, decomposition produces electricity, sometimes, indeed, in so small a quantity as to require a delicate electro-meter to ascertain its presence ; but when in sufficiently large quantities, then the electricity, thus generated, in turn becomes itself a decomposing agent. As I insist upon this fact, perhaps a simple illustration will suffice to explain more clearly my meaning. What are the articles of food destined for the nutrition of our organism? Nothing but inert substances, which, in course of time, are converted into blood, but by what process? By fermentation and decomposition. Accordingly, when the food is transformed into chyme in the stomach, there is a production of electricity in proportion to the quantity and quality of the substance received in that organ. This is the first step. Next, when the chyme is transformed into chyle in the duodenum, there is another production of electricity. Electricity is produced, according to the same law, all along the small intestines, and the larger one, the colon. Then, when the blood is formed and perfected, it is decomposed into all the various organs, into all the secretions, either mucous or serous, and so forth, until ultimately the body itself is decomposed for the expulsion of the refuse of its wear and tear, and its old materials, in order to admit new ones, to be subjected in their turn to the same processes again. So it is that electricity is being constantly generated in the body by a law which involves its very permanence and duration.

We are justified, then, in coming to another consideration of paramount importance, which is that, if in the state of health we generate the precise quantity of electricity duly required for the performance of all the vital functions, what must happen when that electricity falls short? Well, electricity is to the body like steam to the engine. If there is not sufficient for the full working of the machinery it slackens, and if new steam is not reproduced the machinery ceases working altogether. This is an illustration of the action of electricity on the living machine. If there is not an adequate supply of electricity the living engine loses power—the circulation becomes languid, nutrition is deficient, and the secretions imperfect. If this deficiency is not supplied in time, the want of it becomes the fruitful cause of various indispositions and diseases, more or less grave and fatal. Then it is that we require electricity to re-establish the order and functions of the debilitated organism ; but shall we obtain it if the stomach, which we may compare to the boiler of the engine, is itself out of repair—if it can no longer receive the quantity of fuel requisite for the generation of electricity? and if all the organs depending on, or subservient to, its healthy action do not receive from it the impulse necessary for that portion of electricity essential to the due discharge of their functions! What is to be done in this case? We must have recourse to artificial electricity; we must continue to saturate the whole body with ready-made electricity, which is produced by the same method as that generated within the body itself. This electricity I denominate *chemic*, and it possesses the same virtues, properties, and qualifications as the natural. I immerse the patient, then, in a bath so contrived as to introduce the electric fluid at once into the whole organism, and to make it permeate every atom of which the body is composed. I call this an electro-chemical bath, because the electricity which it supplies promotes these chemical functions, upon the right discharge of which health depends, and the restoration of it where it has been impaired.

Various other names may be given to this species of electricity. I have adopted the generic one, but it might be termed with equal propriety "The Electricity of Decomposition." Facts will bear me out in this appellation. When I was a student I was taught that there were but thirty-two simple bodies, which, as they could not be decomposed by any chemical process, were considered as primordial elements. Since that period, however, they have been decomposed, and

we have now double the number. By what means has this been effected? By electricity.

Thus it is that this kind of electricity is the greatest decomposing power in nature. As such it has also another therapeutic virtue. When the body is impregnated with it, it decomposes all the extraneous substances which are retained either in the bloods or in the tissues, and these, when reduced to their atomic condition, are carried out by the electricity through the pores of the skin. The organism is thus relieved of every kind of substance or matter which is heterogeneous to the constitution.

With equal propriety we might term it physiological electricity, as promoting all the physiological functions; or, again, "medical electricity," as that employed for the cure of diseases.

I propose, in my next paper, to treat of that other natural electricity called "static," but which I prefer to denominate "atmospheric." It is that electricity which we breathe, which floats in the atmosphere, and is found upon the surface in opposition to that which exists below and within the earth.—I remain, dear sir, yours truly,

J. Caplin, M.D., F.A.S.L.

THE ROYAL SOUTH HANTS INFIRMARY.

TO THE EDITOR OF THE MEDICAL PRESS AND CIRCULAR.

Sir,—This question has been so thoroughly discussed in your paper, and treated with so much impartiality, that I am unwilling to throw into the balance the feelings of the partisan.

The controversy commenced in your columns in 1854, and has been maintained principally by your aid to the present time. I am therefore desirous that the review should emanate from some disinterested member of your staff.

The interest of the question is not confined to Southampton. Its results seriously concern every medical man who practises within a given distance of a borough or county hospital. The thanks I have received from practitioners—north, south, east, and west—demonstrate that my past efforts have been appreciated, and is at least an encouragement to persist in the same course until my object shall have been attained.

The personalities which have been introduced into the discussion are abominable and greatly to be deprecated. An impartial investigator will discover that during the whole of the controversy, from 1854 to the present time, my opponents have unceasingly made them the substitute for argument. Take as a specimen the calumnious charges, and their complete refutation, in the printed letter enclosed, *dated Feb. 6th*, 1867, which, independently of what had previously occurred, at once roused me to do all in my power to support the efforts of Mr. Scrase, who is a retired member of our profession, therefore personally disinterested, and whose object in taking up the question was, I believe, purely philanthropic. I had never exchanged a word with Mr. Scrase on the subject until he was in the heat of the contest.

The spirit of your article of 6th March will, I feel convinced, meet with general approval; but unfortunately mistakes as to facts have crept in, which I am sure you will be only two anxious to correct, since other journals have seized on the same points and magnified them to the utmost. The journals referred to having written very diversely and strongly within a comparatively short time will be called upon to explain. We take it for granted that, like the rest of their recent writings, the explanation will neither amuse nor interest, but simply endorse the opinion generally entertained of sudden changelings.

The mistakes referred to are, that none of the cases brought forward by Mr. Scrase in support of his allegation of bad surgery *are recent.*

The assertions of the inquirers, as reported in the papers, and it must have been most difficult to report correctly, for the sound which emanated from the room in which the inquiry was conducted resembled more the ravings of maniacs than the converse of calm dispassionate inquirers, would lead most people to the same conclusion.

Now one of the cases extended so far back *as eight years, all the others* were as recent as they could have been to have given the infirmary surgeons the full advantage of their treatment. If too recent, their reply would have been that the tumour would return again, as it had done thrice before—that the fractured thigh had not recovered its full powers, &c., which the poor fellow had been told only a few months ago—that the eye might yet improve, &c., &c., &c.

Another mistake, and one of considerable importance is, that several years ago an inquiry was made into some alleged mismanagement of that institution, *and that the very cases recently brought up were then alluded to.* This statement did not appear in the newspaper reports, and is quite a mistake; consequently the source of such a mis-statement should be sifted. The former inquiry, conducted in even a worse spirit, if possible, than the recent one, took place in 1854. The date of all the cases investigated, or rather of all submitted for investigation, on Monday, February 18th, 1867, preclude the *possibility* of the previous inquiry including them; whilst the names of a large number of complainants can be given as having since appeared from time to time in the medical papers—Gregory, Slade, Jockyean, Channell, Hadden, Thorne, &c. The right management of the institution would at once alleviate personalities. Let merit in the appointments be in any way recognized, the three years' breathing of the Southampton atmosphere rendered unnecessary, the plurality of votes abolished, &c., &c., then will the now so-called charity be made a really useful institution, and prove what it ought to be, a blessing to the poor, a medium of uniting the medical men of the town and neighbourhood in good-fellowship, besides being of real service to the general community, instead of continuing to prove, as it has done for a quarter of a century, an apple of discord and everything else than what it was designed to be by its benevolent founders. The misunderstanding consequent on the violence and confusion at the recent inquiry is fairly rectified in the comments thereon which appeared in the *Southampton Advocate*, and which I herewith enclose.—I am, &c.

Edwin Hearne.

DISPENSARY ABUSE.

TO THE EDITOR OF THE MEDICAL PRESS AND CIRCULAR.

Sir,—If it be true that "to every thing there is an allotted use," I conceive the converse is equally correct—viz., to everything there may be an abuse, and of the many abuses to which the profession of medicine is subjected, it may be conceded the abuse of the *red ticket system* is one of the most reprehensible. Why it is that Dispensary Guardians in general are different from other men in their appreciation of the wants and services of others, is a question on the discussion of which it is not my intention now to enter, but the fact remains uncontroverted that so they are, and use their power to an extent quite beyond the scope and intention of the poor-law authorities, for I venture to assert it never was the desire of the Board that the medical officer of a dispensary should attend gratuitously, either by day or night, patients in much better circumstances than himself, although they might have the privilege of being a relative or friend of an all-powerful guardian, and therefore able at any time to procure a red ticket.

In illustration of what I have above asserted, I would desire to record the following instances which came under my observation a few days since, and form the ground-work of the subject, which, with your permission, I wish to bring before the notice of the profession through the instrumentality of your pages:—

A few days since, happening to call on a brother medical man in charge of a dispensary in my neighbourhood, casually looking over the "Relief Register," I observed the following entries of that morning:—1st. "This man occupies a house valued at £8 a-year, is a skilled carpenter, has a good pianoforte, &c., &c., in sitting-room." 2ndly. "This child's father is the owner of four cabs, two cars, and eight horses;" and "a butcher's child, earning £1 6s. a-week." At the same time my friend assured me these were only a few of the very many instances of a similar nature daily occurring, and that this evil was on the increase, he having no power to refuse such calls, the only redress being to bring the matter forward at the monthly meeting of the committee, when the subject being considered, "past and gone," was consigned to oblivion, only to be repeated on a future occasion.

Now, sir, I think you will agree with me that "these things should not so be," and as a remedy I would suggest that every medical officer attached to a dispensary on his induction to the duties thereof, should be supplied with a correct list of the names and places of residence of all persons within his district entitled to gratuitous aid from the dispensary medical officer; such list to be made out by the relieving officer, and approved of by the dispensary committee at its general meeting every year, or oftener if requisite. I am fully aware the above plan would be attended with considerable trouble, and require frequent supervision and correction, yet I think the very same objections hold good with regard to the register of qualified parliamentary voters, and of those liable to poor's rate taxes, &c.,

&c. By this means also the medical officer would be enabled, as most clergymen are, to recognise and personally know "the flock over which he may be placed." If these means were adopted, and the number of those entitled to gratuitous dispensary relief ascertained, should any properly entitled thereto be excluded, it might be provided that such should make application to the committee, and if approved of, then placed on the list supplied to the medical officer, thus preventing any *one* guardian having the disposal of gratuitous relief to any one he pleased. Should you, sir, consider the above worthy insertion, with a view to ascertain the mind of the profession thereon, and should same appear to them to meet the requirements of the case, I shall on a future occasion, with your permission, have much pleasure in adverting to the subject with regard to the "qualification" necessary to entitle parties to be entered on the dispensary officer's list, &c., being deterred on the present occasion from so doing, until the above subject of dispensary "reform" shall have been brought before the profession at large through your medium.—I remain, faithfully yours,

JOHN S. A. CUNNINGHAM, M.D.

THE ACTION OF HENBANE.

TO THE EDITOR OF THE MEDICAL PRESS AND CIRCULAR.

SIR,—I am in a dilemma, and will feel thankful for a little light. Nearly a quarter of a century since, I held the office of Resident Medical Officer to a great hospital for the space of ten years, where, from repeated observation, the conviction was forced upon me that hyosciamus possessed no narcotic or sedative property whatever. I have ever since expressed and acted, when opportunity offered, on that opinion thus deliberately formed. Other practitioners of high standing have pooh-poohed this opinion, and overruled it by simply throwing the weight of their great experience in my face, this I had to school myself to bear with patience. But a time at last came when I rejoiced to read in the MEDICAL CIRCULAR (some four or five years since) a report by a certain commission appointed in Paris, expressly to test the properties of all varieties of this drug; the roots, the stems, the leaves, the flowers, the capsules, and the seeds were severally and conjointly experimented on in every possible form of tincture, powder, extract, infusion, decoction, &c. The result of all their experiments, so far as I remember, was, that they pronounced hyosciamus to be destitute of all narcotic or sedative properties, that it produced nausea, vomiting, purging, poisoning—anything but quiet and repose.

Sometime after the report of this Commission, I revisited the great hospital where I had lived, after an absence of almost a quarter of a century, and there saw one of its celebrated surgeons pass a catheter, a rigour ensued, and he directed the conventional dram of tincture of hyosciamus to be given at once, just as in the olden time. I requested him to inform me if I had been dreaming all these long years. And now again, in your journal of March 8th instant, I read amongst the questions for examination in the King and Queen's College of Physicians in Ireland the following :—

"Prescribe a draught containing tincture of hyosciamus for want of sleep in a case of typhus occurring in the adult, &c." Now I want to know from you, should not this be instead, "Do not prescribe a draught containing tincture of hyosciamus for want of sleep in a case of typhus fever, &c."

My object is simply to express what I believe to be a well ascertained but much neglected truth, regardless of the store of idols of Bacon, taken from the rusty armory of their experiences, by which I may be assailed by the mass of the profession who stand in the forum or market-place, to any of whom you are at liberty to give my name if required. I enclose my card, and have the honour to remain, sir, your obedient servant,

J. C.

QUACK ADVERTISING.

"Household Almanack" Office,
18, Lower Ormond-quay, Dublin, March 11, 1867.

TO THE EDITOR OF THE MEDICAL PRESS AND CIRCULAR.

SIR,—My attention has just been called to an article in your last issue headed "Quackery Triumphant," in which the writer (Dr. Cunningham) refers to the "Dublin Household Almanack," of which I am the proprietor, in terms so totally devoid of accuracy or truth that I am quite at a loss to know why he has condescended to adopt such a discreditable mode of illustrating his subject.

Dr. Cunningham states that the "Dublin Household Almanack for 1867" contains only 24 pp., and that, of that number, the advertisements occupied 12 pp., six of these being crammed with quack advertisements.

The best answer I can give to this gross mis-statement is to send you a copy of the Almanack in question, which you will perceive contains no less than 72 pp., being three times the number stated by your correspondent; of which the advertisements occupy as much as 23 pp. If Dr. Cunningham's statement be true, his copy must be an imperfect one.

He further states that there are 6 pp. of quack advertisements, amongst which he includes "Blair's and Frampton's pills, Hayman's balsam of horehound, Dr. A. Coffin's tricopherous, Norton's pills, Keating's cough lozenges," and many others, which are sold by the most eminent chemists in this city. I have nothing to do with the question of what are "quack medicines" and what are not so, nor do I think it is a publisher's business to decide this question. It is one emphatically for the medical profession, assisted by public opinion, to deal with by means of corrective legislation; nor will a remedy ever, in my opinion, be found for the alleged evil by abusing newspaper proprietors and others who insert these advertisements, although I think much could be done meanwhile by the establishment of private hospitals or dispensaries for the respectable classes, somewhat on the principle of the "Maison-de-Sante," to which persons who have the means to pay for regular professional assistance could resort for that purpose. In this way you would soon find that the genuine coin would be preferred to the baser metal, and those who are duped by unprincipled and unskilled pretenders would gladly prefer the legitimate practitioner, and thus be saved from wholesale plunder and the consequences of an imperfect cure. The exhibition of such dispensaries should, however, be made known by judicious advertising, otherwise they cannot have the desired result of spoiling the trade of charlatans; and I may add in conclusion that to insure entire success a degree of privacy (which is the stronghold of quackery) must be guaranteed, or the classes in question will persist in visiting those places where they are sure it will be observed.—Your obedient servant,

THOMAS HACKETT.

[The copy of the Almanack forwarded to us bears out the statement of the proprietor as regards the unimportant question of dimensions. Dr. Cunningham is perfectly justified in stigmatising the advertisements which occupy a large proportion of its space as disgusting and injurious to public health and morals. We differ from Mr. Hackett in the opinion that it is not the business of a publisher to decide what are quack medicines. It is certainly the duty of a respectable publisher to form an opinion, so far as he is able, and if obscenity or dishonesty are patent in the advertisement, to expunge it. The offence is greatly aggravated in this case, because the publisher is also the vendor of these nostrums, and may be reasonably expected to possess information as to the character of their promulgators which newspaper proprietors seldom have.—ED. M. P. & C.]

OBSCENE QUACK ADVERTISEMENTS.

TO THE EDITOR OF THE MEDICAL PRESS AND CIRCULAR.

SIR,—In the number of your journal for March 6th, a letter appears from Dr. Cunningham which relates to a subject *(viz.,* that of indecent quack advertising), which, it must be admitted, deserves serious consideration from all who feel interested in the welfare and dignity of our profession.

In that communication he implicitly alludes to a part of the subject which in my mind is that of most seriousness amongst the questions involved, and which it is therefore my object in writing this letter more explicitly to call attention to. I refer to the fact of newspapers of respectability giving insertion to the offensive documents under consideration.

That men lost to a sense of the dignity and respectability of our profession should hang about its outshirts, and scandalize it and themselves by the indecent system complained of, is no more than we could expect. These filthy members of society prey upon the interests of every profession alike, and every community must be prepared to compound for a certain proportion of "black sheep" amongst its members, and perhaps the medical profession suffers more in this way than do the others; that, moreover, these individuals should adopt any means, however unworthy, of thrusting themselves into public

notice is not matter of surprize, and is an evil which we can, I think, scarcely expect to check altogether, without interfering too seriously with that boasted "liberty of the subject," which must always leave it in the power of certain persons to make blackguards of themselves without transgressing the letter of the law. But, sir, I do think that our profession has a right to expect better at the hands of the respectable portion of the literary community, than that it should in any respect be found to value itself with these enemies of its best interests. Surely the editors of respectable daily journals like the *Irish Times* do not require to be told that notices such as those quoted in Dr. Cunningham's letter are injurious to our profession, are distasteful to its reputable members, and in their publication are doing a damage to society, and that therefore the paper which publishes them is thus abusing that power which it is the constant boast of "the press" that it wields for the public good; and if they *do* require to be told so, let them now, sir, learn the lesson from you, and we have every right to expect that it will be attended to.

Nothing tends so to perpetuate imposture as its finding its way into respectable society, and I think it must be pretty evident to any one that the vitality of the medical quackery system is kept up by no single circumstance so much as by the place its advertisements have secured in the columns of respectable journals. So long as its exposition is confined to such means as an obscene placard in a dark corner, or a card thrust furtively and confidentially into your hand by some skulking wretch, it wears on its very surface the stamp of surreptitious and dishonest humbug, which almost every one can easily discriminate, and there is comparatively little danger; but when it takes the form of a prelude to the day's news, and that in a paper which will find its way into all respectable circles of society, the credentials of the system are not so easily detectable, and real and serious danger and damage are liable to result. Besides all this, the appearance, in such a place, of such a document cannot be felt as other than an insult to the respectable portion of our profession. Now surely all this is not intended; and it is to be hoped that the sin is simply one of thoughtlessness. I cannot think that the conductors of the public journals, in which this practice of giving insertion to indecent and quack advertisements maintains, perceive that they are lending themselves to all this in so doing. They do not mean, I am confident, to foster the growth and spread of dishonesty and imposition; they do not mean, I am equally confident, to offer any insult to the respectable members of the Medical profession; and yet that they are daily doing both, is simply a fact. I do not forego the hope that it is only necessary to have this pointed out to them to have the remedy promptly and effectively adopted. I am, sir, your obedient servant, an M. B.

NON-STIMULATING TREATMENT OF DISEASE.

TO THE EDITOR OF THE MEDICAL PRESS AND CIRCULAR.

Dear Sir,—In your issue of the 6th instant you devote a leading article to consideration of the above subject in its relation to medical practice in our Poor-law Unions, and you express regret that I should have made an "unconsidered proposal to save money by refusing stimulants for the treatment of disease" to the Guardians of the North Dublin Union. That you should have arrived at this conclusion surprises me not a little, for you have yourself done me the favour on several occasions of laying my letters on this subject before your readers, and I have not until now had any reason to believe that my statements to the public on the subject—which not only found an extensive circulation in your journal, but also in the columns of some of our daily papers—were not alone interesting from the facts stated in them, but also likely to be useful in a medical point of view, by drawing the attention of our physicians generally to the mode of treatment adopted by Dr. Nicolls, and which has been practised by him for eighteen years with the most satisfactory results, and which you yourself characterised as "most encouraging" in your issue of 25th October, 1865. Nearly two years' further experience have confirmed the value of Dr. Nicolls' non-stimulating practice.

I wish you could have made room for the entire statement I laid before our North Dublin Union Board on the 10th December, as the extracts you have given from it omit several of the important facts which justified me in again drawing public attention to the subject. You do Dr. Nicolls and me great injustice in supposing that saving money is our chief object, and I do not think either of us have written a line which justifies you in coming to that conclusion.

I have shown, on the testimony, not of Dr. Nicolls alone, but also on that of several other medical men, that the use of alcohol in the treatment of disease, as it is still used by many physicians, and as it was more generally used only a few years ago, is a practice opposed to the latest discoveries of science as to the medicinal value of this poison. It is not proposed by any that its use should be altogether given up, for it is believed there are cases in which no other known medicine can be used with equal chances of success; but if I have shown, on able medical testimony, which I think cannot be disputed, that such cases are few indeed, surely I am fully justified in informing all our Boards of Guardians that sickness is rendered more inveterate, that mortality is increased by the free use of alcohol as a medicine, and that the poor in our workhouses, as well as the ratepayers, are injured by the practice. The comfort and recovery of the sick poor should, no doubt, be the first object of all poor-law guardians, and we have no reason to doubt that it is not; but we have another duty also to perform, which is, not to tax the ratepayers beyond what is necessary for securing those objects; to tax them heavily for the purchase of articles which do mischief instead of good, which destroy life instead of saving it, and which keep alive a sad delusion in the minds of men that alcohol can be used with safety, even by persons in health, is contrary to the dictates of common sense, and the sooner such delusion can be got rid of, the better it will be in every sense for all parties.

Dr. Edmunds, of London (the last authority I have seen on the subject), lately delivered a lecture in Manchester, on "alcohol as a medicine," in which he points out in a most masterly manner, that alcohol is not a stimulant in any true sense of the term, but that it always acts as a narcotic. His address must arrest the attention of medical men, and hasten the time, which I believe is not far distant, when physicians will place alcohol in the same category as they have placed mercury and blood-letting; use it sparingly in practice in future, and teach men that it is indeed the enemy of the human race. If Dr. Edward's published opinions, which he supports by apparently unanswerable anatomical and physiological reasoning, be not proved to be unsound, the present use of alcohol as a medicine cannot be long upheld by intelligent and well-informed physicians, who must discard it from their general practice. I have good reason for believing that our most eminent medical men are now using this dangerous article much more cautiously than they did but a few years ago; so that the thoughtful and educated men in the profession, who condemn its present free use as a medicine except in a few cases, are likely to increase in number and influence.

As you may not have seen Dr. Edmunds' address, I send you a Manchester paper which contains it. I thank you very heartily for the permission you have given me on several occasions of laying my ideas before your readers, and I hope you will add to the favours already conferred on me, by publishing this justification of my conduct, upon which you have animadverted.—Yours, very truly.

James Haughton.

[Mr. Haughton, on re-perusal of our observations, will observe that we accused certain Boards of Guardians of having "jumped at an unconsidered proposal to save money by refusing stimulants for the treatment of disease," and did not at all include him or Dr. Nicolls, whose motives we have every confidence in, in our censure. The value of Dr. Edmunds' opinion as a counterpoise to that of almost the entire scientific world may be estimated by the fact that that gentleman is, if we are not mistaken, a Professor in the *Female* Medical College. Ed. M. P. & C.]

Cod-Liver Oil.—The commercial reports sent in from time to time to the Foreign Office by our consuls abroad form a most useful element in that vast accumulation of statistical literature which is yearly printed at the national expense for the supply of members of Parliament with waste paper. A recently issued number contains carefully compiled reports on the fisheries of Norway and Iceland, and in an interesting notice in the *Saturday Review* it is stated that the yield of the oil so largely used in medicine varies a good deal from year to year, sometimes 300 livers being sufficient to make a barrel, while at other times as many as 500 are required for that purpose. In 1866 the Loffoden fishery supplied about 26,000 barrels of oil.

THE *LANCET* AND THE OBSTETRICAL SOCIETY OF LONDON.

Our contemporary, the *Lancet*, has deemed it advisable to give a little wholesome advice to the Fellows of the Obstetrical Society as to the manner in which they should record their vote on a resolution of the Council for the expulsion of one of their members. We fondly hoped that the Medical Press would, at the present time, have stood aloof from offering any suggestions until they were in possession of certain "published matters" on which the proposed expulsion of one of the Fellows of this Society would rest. However, as the *Lancet* has thought proper to deal with the matter, and that in a way which, to our mind, indicates foregone conclusions and biassed feelings, we think it is only in the interest of professional justice to express our sentiments on a subject which has such a bearing on the independence and honour of our profession. In the first place, then, we would say, that we are fully satisfied that the Fellows of the Obstetrical Society are quite alive themselves to the difficulties that surround them in coming to a decision, and doubt whether they receive with due gratitude the overweening, officious, mentor-like guardianship of the *Lancet*, and that they will smile when they read, in what is styled the "Medical Annotations" of that journal, "One word of advice to the Fellows." The advice so fragmentally introduced is as follows:—

"Their judgment should be formed ere they enter the room, and should be based upon a careful consideration of the 'published matters' with which they will be supplied."

To us, we confess that this advice, so solemnly and judicially proffered, amounts in effect to this—Let the jury make up their minds privately and separately in their own homes, before they enter the jury-box. Let them not trouble themselves to hear what the accused, whose reputation and honour as a Surgeon, a gentleman, and an Englishman are at stake, has, by any possibility, to say in his defence; and further, let them make up their minds, not after hearing the summary of an unbiassed judge, but after reading a quantity of extracts from some published matters made by the accusers themselves, and brought together how, when, and as they please.

In the name of justice, in the name of our general professional honour, let the accusers of Mr. Brown hesitate before they pursue their head-long career. If this thing is done without it be really in the interest of justice and necessity, it will be an eternal disgrace to the Society, and surely tend to reduce it from its present position to a clique, a monopoly, a coterie, which, like Athenian citizenship, would be dangerous to all men of character and reputation. By all means, then, let the jury who will have to acquit or condemn Mr. Brown, consider the responsibilities of the situation they occupy. It is, we presume, more than probable that the charges brought against Mr. Brown will be explained away, at any rate it is, we think, possible that the Fellows of this Society, may not come to the conclusion that Mr. Brown is such a leper that to approach is to defile, and moreover, that if any doubt on the matter they will give the benefit of it to the accused.

Under any circumstances, the hot haste exhibited by the accusers seem quite unaccountable. To them, as to all other right minded men, the whole affair must be inexpressibly painful, and, however to their minds necessary in the interests of the profession, yet one would suppose a matter worthy of the utmost deliberation, and demanding especially every opportunity for the justification of the accused. However it be settled, whether Mr. Brown be voted a Fellow or voted a nuisance, the stigma, the brand, the hot iron which is about to set its mark will not so readily cool. Mr. Brown will be on his trial on the 3rd of April, and every tittle of evidence, *pro* and *con*, must be heard before any just decision can be arrived at.

We must ask leave to put in the pillory one other piece of advice in the same article. It is this. "If they (the fellows) hesitate, waiting for a decision from any discussion which may take place, *the business*, [the italics are ours], which ought without doubt to be definitely concluded at the meeting will stand a chance of being delayed." What!! the literary affairs of the Obstetrical Society to be of such prime importance, that they cannot be delayed for an evening, for an hour, when the character and reputation of one of its most celebrated members is at stake. Heaven save the mark!

Again, we are told that delay "would be unjust, both to the Fellow whose conduct is in question, and to the Council who have undertaken a most unenviable task from a conviction that the interests of the Society and the Profession at large demand vigorous proceedings at their hands."

This last paragraph we know nothing about, as we have not consulted the one or the other, but the "unenviable task" that we have to perform is to reproduce in our own columns these few annotations.

We cannot, however, conclude without expressing our astonishment that the "published matters" involve such considerable care in their arranging and printing.

We trust that when they *do* appear that they will not be so bulky as to prevent our criticisms on them in our next number.

Medical News.

Apothecaries' Hall.—The following are the names of the gentlemen who passed their examination in the science and practice of medicine, and received certificates to practise, on Thursday, March 14:—

Charles Arthur Bush (St. Bartholomew's Hospital), Park-street, Bath.
Alfred John Freeman (St. Thomas's Hospital), Southsea, Hants.
Alfred Trubshaw (Liverpool), Royal Infirmary, Liverpool.

The following gentleman also on the same day passed his first examination:—

John William Pinder, Middlesex Hospital.

At a Meeting of the Fellows of the Royal College of Surgeons in Ireland, held, pursuant to Charter, on the 15th inst., Archibald Hamilton Jacob, M.D., F.R.C.S., was elected a Member of the Council of the College.

The Baker Brown Testimonial.—The testimonial to be presented to Mr. Baker Brown, is now on view at Mr. Benson's, 25, Old Bond-street, by whom it was designed and manufactured. It consists of a silver dessert service of six pieces—centrepiece, plateau, and four fruit stands *en suite* of a very chaste classic pattern.

Medical Charities.—The Hon. Lady Caroline Murray, of Richmond, Surrey, has bequeathed £50 each to the Middlesex, London Fever, and Marylebone Hospitals; and £25 to the Royal Eye Infirmary. This lady has also bequeathed liberal sums to other charities not strictly medical.

Ovariotomy.—At a meeting of the committee of Queen Adelaide's Dispensary, Bethnal-green, held March 7, it was resolved that a room in the new building should be devoted to the above operation, under the care of Mr. Maunder, the consulting surgeon.

We understand that Dr. Struthers, Professor of Anatomy in the University of Aberdeen, late Lecturer on Anatomy, Edinburgh, is a candidate for the Chair of Anatomy in the University of Edinburgh, vacant by the death of Professor Goodsir.

Medical Society of the College of Physicians, Ireland.—Sixth Meeting, Session, 1866–67.—Wednesday, 20th March, 1867, tea at eight; chair to be taken at half-past eight, P.M. Communications.—1. Dr. Moore Madden—"A remarkable case of Psoas Abscess, with some observations on the treatment of the disease." 2. Dr. Law—"On Cerebro-spinal Arachnitis." 3. Dr. Hughes—"To exhibit, and make some observations on, a case of Pemphigus."

THE STATISTICAL SOCIETY.—Council and Officers for 1867-68.—President—*The Right Honourable W. E. Gladstone, M.P. Council—*Walter Bagehot, M.A. ; Major-General Balfour, C.B. ; *R. Dudley Baxter, M.A. ; Lord Belper ; Sir John Boileau, Bart., F.R.S. ; William John Bovil ; Samuel Brown ; William Camps, M.D. ; David Chadwick ; Leonard Henry Courtney ; William Farr, M.D., D.C.L., F.R.S. ; William Augustus Guy, M.B., F.R.S. ; James Thomas Hammick ; Frederick Hendriks ; James Heywood, M.A., F.R.S. ; William Barwick Hodge ; Right Hon. Lord Houghton ; Charles Jellicoe ; Francis Jourdan ; *John Lambert ; Leone Levi ; William Golden Lumley, LL.M. ; Matthew Henry Marsh, M.P. ; William Newmarch, F.R.S. ; Frederick Purdy ; Rev. J. E. T. Rogers, M.A. ; *William Lucas Sargant ; Col. W. H. Sykes, M.P., F.R.S. ; *Jacob Waley, M.A. ; John Walter. Those marked * are new members. Treasurer—William Farr, M.D., D.C.L., F.R.S. Honorary Secretaries—Wm. Augustus Guy, M.B., F.R.S. ; William Golden Lumley, LL.M. ; Frederick Purdy.

WE are glad to observe a considerable increase in the amount taken this year in the army estimates for carrying out the Act (27 and 28 Vict., cap. 85) "for the prevention of contagious diseases at certain naval and military stations." Last year only £7000 was voted on this account. This year the vote has swelled to £28,271. The money is distributed between the following stations:—Chatham, London Lock Hospitals, and Woolwich, Aldershot, Windsor, Colchester, Shorncliffe, the Curragh, Cork, and Queenstown; a portion going to defray the expenses of the inspector and executive.

CALOMBINE IN DYSPEPSIA—WHITTSTOCK.—Exhaust Colombo-root with rectified alcohol, and evaporate to dryness the alcoholic solution so obtained. Treat this extract with water, and agitate it with an equal volume of ether. Draw off the ether with a syphon, distil off the greater part, and set the remainder aside to crystallize. Wash the crystals with cold ether, and press them in filter paper. The active principle of colombo *columbine* thus obtained is recommended in some forms of dyspepsia in doses of five to fifteen centigrammes daily.—*L'Union Medicale.*

M. AUZIAS-TURENNE adheres strongly to his own views, believing in the possibility of inoculating animals with syphilis. He is satisfied of this by his own experiments which, however, have not obtained general confidence. Our 'confrére' yesterday, read the conclusion of the pathological history of a cat, that he had inoculated with syphilis, and of which he had some time since presented us with a short account. M. Ricord is not satisfied with this very complicated history, and he, with M. M. Bouley and Guérin, have asked for a commission to set at rest, finally, the question of the transmission of syphilis to animals. The Vaccine Commission appears to have determined that the inoculation of cows with syphilis has failed. The commission now asked for has just been nominated.—*L'Union Médicale.*

OXALIC ACID has been produced synthetically by M. Berthelot, by means of super-oxygenated acetylene placed in contact with permanganate of potash. This transformation is easy and prompt, and in considerable proportion. It is also certain that by causing permanganate of potash to act upon carburets analogous to acetylene, amylene, and ethylene, many other equally interesting synthesis may be produced. This important discovery was announced at the meeting of the Academy of Sciences, at Paris, on the 7th inst.—*Comptes Rendas*, 1867, No. 1.

MISS NIGHTINGALE ON TRAINING OF NURSES.—The committee recently appointed by the Poor-Law Board to advise upon the amount of space needed in metropolitan workhouse infirmaries, and upon other allied matters, requested Miss Nightingale to give her opinion and advice in relation to a supply of trained nurses for these infirmaries, and received from her a series of suggestions upon the subject. Miss Nightingale begins with observing that the word "nursing" is improving its meaning every year, and that what she proposes to treat of is "trained nursing"—that is, qualified nursing; "hired nurses, unless they are also trained nurses, are not worth their hire, except by accident." "An uneducated man who practises physic is justly called a quack, perhaps an impostor; why are not uneducated nurses called quacks and impostors? Simply, I suppose, because people have thought that every woman was a nurse by instinct." There is now a great movement over England, and indeed the colonies also, the object of which is to offer inducements to the best instead of the worst women, and to train them in nursing duties under matrons and head nurses (called in hospital language "sisters") as the basis for all nursing appointments whatever. Very few trained nurses are available for workhouse infirmaries; the demand is, and will be for years to come, far greater than the supply. To put one trained nurse, however efficient, in a large town workhouse infirmary is but to waste and throw away a valuable article; she either breaks her heart or becomes slovenly, like the rest, and neglects her duty. In small, well-managed country institutions, where the sick may be nursed by one good trained head nurse, it may do, otherwise no good can be done except in sending in (as at Liverpool Workhouse infirmary) a trained superintendent with a staff of trained head nurses under her. The principle at the training school at St. Thomas's is to train women and to certificate them, and then find employment for them, making the best bargain for them, not only as to wages, but as to arrangements and facilities for success; but at present the difficulty is to supply the demand or a tithe of the demand. Therefore, what Miss Nightingale advises is to complete a staff for one metropolitan workhouse infirmary, and make it a special duty of this staff to train nurses for other infirmaries—to make this one thoroughly complete from the beginning, and set in the right groove from the first, whatever intermediate course may be taken to supply meantime better nursing than at present in the other London workhouse infirmaries. The system adopted at St. Thomas's Hospital under the Nightingale Fund allows the probationers a stipend during their year of training, after which immediate employment is obtained for them, at present as hospital or infirmary nurses, commencing at not less than £20 a-year, with the usual extras; they are required to serve as such hospital nurses for four years, and this is the only recompense exacted for the costs and advantages of training. The principles are substantially the same under the life fund at King's College Hospital, where the training is for midwifery; owing to the great opportunity for this branch of practice in London workhouses the nurses there trained would find a considerable demand from ladies' committees and benevolent institutions, which pay them well. The probationers receive the requisite medical and surgical instruction, at the bedside or otherwise, from the medical professors or resident officers. Miss Nightingale discusses the details of a proper training, suggests two years of it for those who have to train others in their turn, and remarks that in course of time there might be a trained superintendent general for the whole of the metropolitan workhouse infirmaries, responsible directly to the Poor-Law Board. With wages given during training it is thought that fit women (above 25 years of age) will present themselves. They are not likely to be found among the inmates of workhouses, or at all events of London workhouses; but girls leaving the large union schools might be disposed to take hospital nursing, doing what they can in the children's and women's sick wards, and instructed in an industrial department, until the full-blown hospital nurse is developed out of them, when they would earn more than they could ever expect in domestic service. Miss Nightingale is decidedly against placing the nursing establishment under the workhouse master or matron, or the medical officer. In workhouse administration for the able-bodied, there is ever kept in view the necessity of checking the constant tendency of a certain class to fall into pauperism; but with the sick the best policy is to cure as quickly as possible. The two departments are to be conducted on different principles. Vest the general supervision and administration of the infirmary in a governor responsible to the board or committee; vest the whole responsibility for the nursing, the internal management, and the discipline of the nurses in the female head of the nursing staff, responsible to the constituted authorities. The orders of the medical officer are ever to be obeyed, but "in disciplinary matters a woman only can understand a woman." Miss Nightingale goes on to state the results of her experience in reference to the number of beds advisable per ward, the surface area required, and other matters. She notices that the larger the number of sick (up to 800 or 1000) under one hospital government and one matron, the better both for economy and efficiency. Without consolidation of workhouse hospitals a great and quite needless expenditure would have to be incurred in attempting to secure the conditions under which efficient nursing can be carried out. Her object is to include in the proposed arrangements those workhouse sick who are infirm and aged, including "helpless cases," "dirty cases;" "such require more careful nursing than any, and receive it at all good establishments for infirm and invalids both in England and abroad."

Original Communications.

THE TREATMENT OF EPILEPSY; PRINCIPLES AND PRACTICE.*

By JOHN CHAPMAN, M.D., M.R.C.P., &c.

AMONG the first approaches to a true conception of the nature of the proximate cause of epilepsy was that made by Dr. J. C. Pritchard, who, in 1822, published "A Treatise on Diseases of the Nervous System," in which he stated that "the immediate cause of an attack of epilepsy, or that physical change which, in a constitution prepared by natural predisposition, or by the action of morbid circumstances, is the immediate precursor and occasion of the fit, appears to be a preternatural influx of blood into the vessels of the encephalon, or an unusual fullness in some part of the vascular system of that organ." He was evidently led to this conclusion by his sagacious observations of the changes occurring in the diameters of arteries. Concerning their local dilatation and contraction he says:—"A person who doubts the possibility of a change of capacity in the vessels of one part, without any corresponding alteration in the general state of the circulation, may be convinced of it by plunging one arm into a vessel of hot water, and the other into a vessel of cold water at the same time. On again withdrawing his arm, he will find one somewhat larger than the other from the effect of distended vessels, with the external veins dilated and the pulse of the bronchial artery and its branches stronger and of greater volume than in the arm which has been immersed in cold water." Not only in his hypothesis of the nature of epilepsy but also in the reasoning by which he sustained it, Dr. Pritchard foreshadowed, to a wonderful extent, the doctrines of the most eminent pathologists of the present day. But even the most accurate observer, profound thinker or gifted genius, can rarely advance far in the path of discovery beyond the point attained by his scientific contemporaries: he is related to his age, and subject to its conditions. Before Dr. Pritchard's views of the general character and kinship of diseases of the nervous system could become fully developed, and before their fundamental truthfulness could be confirmed, our knowledge of the structure and functions of the nervous system needed to expand far beyond the dimensions it had reached at the time he wrote. Hence his hypothesis that the proximate cause of the majority of diseases of the nervous system consists in excessive local affluxes or effluxes of blood in the nervous centres, independently of any acceleration or retardation of the general circulation, could only take its place as one among the many "guesses at truth,"—a fortunate guess indeed, so far as it went, but incapable, when first expressed, of being proved either right or wrong.

So long as the spinal cord continued to be regarded as a mere bundle of conducting fibres—the inverted trunk of a nervous tree whose roots are in the brain and whose branches spread throughout the body, and so long as the spinal nerves were held to be single homogeneous structures, transmitting impressions from the periphery to the centre, and the mandates of the will from the centre to the periphery, it was impossible to divine, with certainty, the exact nature of a large group of diseases of the nervous system, and notably the nature of epilepsy. Until the individuality of the different columns, and of the several segments of the spinal cord, and the possibility of their independent action were recognized; until the era of positive knowledge of neural-physiology was inaugurated by Sir Charles Bell's great discovery of the two-fold or compound nature of each spinal nerve; until the automatic excito-motor functions of the cerebro-spinal axis, comprehending its afferent and efferent nerves, was demonstrated and immoveably established on a scientific basis; and until the function of the sympathetic, in so far as it presides over the contraction and dilatation of blood-vessels was determined, physicians engaged in the study of epilepsy were groping in the dark, or, at best, pursuing their enquiries in a dim half light, and were unable to frame any hypothesis affording a consistent and adequate explanation of the numerous and wonderful phenomena of that terrible, and for ages inscrutable, disease.

No single discovery in the vast domain of biology has contributed so greatly to demonstrate the exact nature of epilepsy as that made by Bernard when he ascertained the functional relation of the sympathetic nerve to the vascular system; while confirming that discovery experimentally, Brown Séquard at once appreciated its immense importance as a guiding light in the most obscure regions of pathology, and by its aid clearly explained the production of the loss of consciousness constituting the initial stage of a fit of epilepsy, as well as the phenomenon of *le petit mal*. By demonstrating the great *rôle* played in a fit of epilepsy by what he called "the true spinal cord," Dr. Marshall Hall did much towards building up the correct hypothesis of the disease; but it was impossible that his doctrine concerning the functions of "the true spinal cord" could suggest more than the half of that hypothesis: it could only be completed when at length the nature and extent of the controlling influence exercised by the great nerve of organic life—as Bichat called the sympathetic—over the whole vascular system, and therefore over the nutrition and vitality of the organism, became perfectly understood.

The doctrine concerning the seat and nature of epilepsy now recognised as true by the most eminent neuro-pathologists has been of long and slow growth, and is the product of the observations, experiments, and elaborate reasoning of many distinguished men; but it is, I believe, generally admitted that no one has contributed so largely to develop and illustrate that doctrine as Brown Séquard. I do not purpose at present to give a critical exposition of it, but merely to state it in order to indicate that treatment of epilepsy and epileptoid affections, which is the logical consequence of its acceptance. "Epilepsy," says Dr. Brown Séquard, "seems to consist essentially in an increased reflex excitability of certain parts of the cerebro-spinal axis, and in a loss of the control that in normal conditions the will possesses over the reflex faculty;" and he has shown how this state of "increased reflex excitability" being propagated to those sympathetic nervous centres controlling the arteries of the brain, results in inducing contraction of those arteries, and the consequent loss of consciousness which ushers in an epileptic fit. Dr. Russell Reynolds is an able exponent of this doctrine, and in his comprehensive and elaborate work on epilepsy expresses it as follows:—"Augmented activity in the nutritive process of the medulla oblongata and spinalis is the prime and essential fact in epilepsy; it needs the addition of but an 'exciting cause' to set in motion the whole train of phenomena which constitute the attack" (p. 260). And again he says:—"The immediate cause of epilepsy is over action of the reflective centre, from increased vascular supply, and exaggerated nutrition, change" (p. 264). This doctrine, as is well known, receives confirmation from the experimental investigations of Kussmaul and Tenner, as well as from the microscopical dissections of Schroder van der Kolk, who concludes that "the first course of epilepsy consists in an exalted sensibility and excitability of the medulla oblongata, rendering the latter liable to discharge itself on the application of several irritants, which excite involuntary reflex movements." Although it is not now my intention to adduce any arguments in support of these views, or to submit them to critical examination, I may observe, in passing, that my experience has afforded me good reasons for believing that their advocates locate the primary seat of epilepsy too exclusively in the medulla oblongata. Both Brown Séquard, and Dr. Russell Reynolds, do indeed say that that modification in the nutrition and function of the nervous structure, resulting in epilepsy, may occur in the spinal cord, but their writings imply that as a matter of

* A Paper read at the Medical Society of London, March 18th, 1867.

fact it does occur much less frequently there than, as I believe, is actually the case. My observations and experiments constrain me to infer that the spinal cord, especially the lower third of it, is very frequently the seat of those morbid changes which induce the disease. Assuming that the pathology of epilepsy here adverted to is in the main correct, it is clear that the only rational and scientific treatment of the disease must consist—(1) in discovering and removing all causes of eccentric irritation, and (2) in exerting a sedative influence on the nervous centres primarily implicated, either by direct action on those parts, or indirectly on the principle of "derivation." Accordingly, Dr. Brown Séquard, when speaking of drugs likely to be most efficacious, recommends "particularly those which determine contractions" of the blood-vessels of the nervous centres, "such as atrophia, ergot of rye, &c." In his lecture on epilepsy he said, "Iron should be avoided unless the fits be due to anæmia or chlorosis. Iron causes alterations of the circulation in the brain of a kind not conducive to the cure of epilepsy." He prescribed bromide of potassium largely, but empirically, for he found its influence beneficial, although respecting its exact *modus operandi*, he had, as he stated to me, no distinct knowledge. In his lecture just mentioned he said, that "when it is taken in large doses for a considerable time, it causes congestion of the brain, and loss of feeling in the urethra, and probably in the seminal vessels. That it causes this loss of feeling is, I believe, an established fact; but experiments, which I shall presently mention, prove that instead of causing congestion it causes anæmia of the brain. Thus, it appears, that both in principle and practice the treatment of epilepsy by this distinguished man, aimed to exert a sedative influence on the nervous centres; and Dr. Russell Reynolds in his chapter on treatment, regards as the first requisite, "the reduction of undue excitablity in the reflex centre," and passes in review the several medicines believed to be most conducive to this end.

But just as the thick clouds which have hung over this subject for ages seem to be dispersing—just as we appear to be forming correct conceptions of the whole region of neuro-pathology, and under their guidance to be steadily developing the principles and method of a scientific treatment of diseases of the nervous system in general, and of epilepsy in particular—we are told that we are the victims of the most complete delusion; that the pathology of convulsive affections, of paralysis, and even of pain, as well as the therapeutical principles and practices founded upon that pathology, is but an ingenious and elaborate dream, which, according to the laws of dream-interpretation, is exactly the reverse of the truth. Dr. Bland Radcliffe, in his lecture delivered to the Royal College of Physicians, has proved, as he maintains, by an irrefragible chain of arguments, illustrated by a series of complicated electrical experiments, that "there is reason to believe that ordinary muscular contraction is associated with deprivation of nervous influence, and not with a contrary state of things.

The logical inference from this doctrine is, of course, that convulsive and spasmodic affections generally are consequences and symptoms of a deficiency of nervous energy in the nervous centres presiding over the muscular system. At the end of his fifth lecture Dr. Radcliffe says—"All the previous considerations lead to this conclusion, and to this conclusion only." And, accordingly, he is led by his peculiar pathology of these affections to declare that "there is reason to believe" that their most successful treatment consists in strengthening the nervous system by every possible means; that the diet of epileptic persons should contain "somewhat more than an average quantity of oily and fatty matters;" that "cod liver oil is very beneficial;" that "alcoholic stimulants are very trustworthy antispasmodic in the prevention and treatment of convulsions;" that "opium may be a more suitable remedy than belladonna;" and that "phosphorous may be given, not only without harm, but with the unmistakeable promise of real and substantial good."

As might be expected, these doctrines find no favour in the eyes of the exponents of the hypothesis previously mentioned; indeed, they seem to think it deserving of only so much attention as may be given to it in a momentary glance. Dr. Russell Reynolds says in a note—"This hypothesis is, in my opinion, incorrect; but except so far as bears directly upon the pathology of epilepsy, a discussion of its merits cannot be entered on here;" and this special discussion he confines to fifteen lines. Dr. Brown Séquard expresses himself as follows:—"It is useless to discuss a theory like this, which is in opposition to almost all the known and the most positive facts of physiology and pathology. I will merely say that if the theory were true, we should always see convulsions in paralysed muscles, and also after death, at the time when nerves lose their power upon muscles."

I think, however, that the indefatigable labour, the extensive knowledge, and the ingenuity which Dr. Radcliffe has brought to bear in support of his doctrine, entitle it to somewhat fuller consideration than has been accorded to it. I shall, therefore, even in this brief essay, say a few words concerning it. After examining many of the chief facts on which he relies in corroboration of his theory, I have satisfied myself that they are susceptible of explanation in a manner quite different from that which he has adopted, and that, rightly interpreted, they lead to a conclusion, both theoretical and practical, diametrically opposite to that at which he has arrived. But to follow him throughout his course of labyrinthic reasoning, and to point out what I conceive to be its errors; to advert to all the facts he adduces, and to show, not only how they have been misapplied, but what is their true significance; to disentangle the truth from the error to which he has made it subservient; and to exhibit the grave practical mistakes in the treatment of disease which his, as I believe, false physiological and pathological theories must inevitably lead him, if he faithfully follows them, I should be obliged to fill the pages of a volume as large as his own. But often, as in this instance, it is more expedient to cut a knot than to spend time in untying it, and I hope to do this by merely stating a number of facts which are thoroughly established, and which, in my opinion, prove that Dr. Radcliffe's doctrines are entirely erroneous.

Of course I presume it will be freely admitted that when ice is applied over a nervous centre, if the influence of the cold reaches directly to that centre at all, it causes its blood-vessels to contract, lessens the amount of blood in it, and, to a proportionate degree, lessens its vitality and functional energy; and that, conversely, when heat is applied over a nervous centre, it causes the blood-vessels of that centre to relax, increases the amount of blood in it, and to a proportionate degree its vitality and functional energy. We know cold and heat applied to the head act respectively on the brain in the manner here stated, and we know that, within certain limits, by taking heat from or adding it to organic structures generally, their vital properties and functional activity will be correspondingly depressed or exalted. There is, therefore, I apprehend, no possibility of escape from the conclusion that if cold and heat applied along the spine exert any direct influence on the spinal and sympathetic nervous centres, cold acts upon them as a powerful sedative, and heat as a not less powerful stimulant. Now, I have ascertained that by exerting the sedative influence of cold on nervous centres, the vigour and activity of the muscles they govern are lessened, and that, conversely, by exerting the stimulating influence of heat on nervous centres, the vigour and activity of the muscles they govern are increased. By an extensive experience I have verified the following facts:—

First, In cases of cramp or spasms of voluntary muscles, the application of ice over the spinal nervous centres related to the muscles affected will cause the cramp or spasms to subside. The cramps of cholera, diarrhœa, sea-sickness, and the ordinary cramp experienced at night by many persons otherwise fairly healthy, as well as the abnormal contraction of voluntary muscles in many other cases, may be subdued by this method properly applied. Moreover, the convulsive spasms of laryngismus stridulus may be arrested in the same way, and even the tonic convulsions

of a strong epileptic fit may thus be greatly lessened both in force and duration.

Second, That at least some epileptic patients are predisposed to have fits by the application of heat along the spine. [The reason, no doubt, why heat along the spine does not induce action of the voluntary muscles is, that the will, which holds them quiescent, is the predominant power. Epileptics, whose tendencies to convulsive movements are increased by heat along the spine, do not *show* these tendencies, but *complain* that they have "fit feelings." I apprehend that if heat could be adequately applied along the spine of a sleeping patient without waking him, the will, being then in abeyance, would permit those tendencies to develop themselves: heat along the spine affects the sympathetic ganglia as well as the spinal cord; and if the heat were applied to the upper third of the spine, cerebral anæmia might be induced to such an extent as to result in loss of consciousness, which, if not the indispensable condition precedent, is, at all events, the most favourable condition for the production of convulsions, which, therefore, would most likely supervene.]

Third, In cases of spasm of involuntary muscles the application of ice over the nervous centres related to the muscles affected will cause those muscles to relax. Spasms or undue contraction of the cerebral arteries causing fainting fits; excessive contraction of the dilatator muscle of the iris, causing an abnormally large pupil; spasm of the central artery of the retina producing weakness of sight (amblyopia), or blindness (amaurosis); spasm of the arteries of the face, causing partial anæsthesia or impairment of tractile sensibility; simultaneous and undue contraction of the bronchial tubes, and of the pulmonary blood-vessels, constituting a not uncommon form of dyspnœa, and, as I maintain, a distinguishing feature of cholera; undue contraction of the gastric and mesentric arteries, preventing an adequate supply of blood from reaching the stomach and bowels, and resulting very frequently in indigestion and constipation; spasm of the uterine (and probably of the ovarian arteries) producing deficient menstrual flux, dysmenorrhœa, and annenorrhœa; spasm of the arteries of the lower extremities producing, habitual coldness of the feet even in summer, may all be overcome—the unduly contracted arteries in each case being relaxed, and the disease consequent on their excessive contraction cured—by the application of ice over the appropriate parts of the spine.

Fourth, Involuntary muscles unduly relaxed may be made to contract by the application of heat over the nervous centres related to the muscles affected. Excessive relaxation of the muscular coat of the cerebral arteries permitting their abnormal dilatation, and resulting in hyperæmic headache, or cerebral congestion with contracted pupil; excessive relaxation of the central artery of the retina producing congestive amaurosis; excessive relaxation of the pulmonary blood-vessels producing pulmonary congestion (which causes dyspnœa, but of a kind opposite to that previously mentioned), and also pulmonary hæmorrhage; excessive relaxation of the mesenteric arteries, resulting in intestinal hæmorrhage; and excessive relaxation of the uterine arteries resulting in menorrhagia, may all be counteracted, the muscular coats of the relaxed arteries being made to contract, and the diseases consequent on their relaxation cured, by the proper application of heat over the nervous centres related to any special group of arteries in question. It is also equally certain that in many cases, at all events, feet habitually warm may be made cold; in other words, that the arteries of the lower extremities may be contracted by the application of heat along each side of the lumbar segments of the spine.

Now, if these statements are true (and I may observe that I can call professional witnesses to confirm nearly every one of them) they prove beyond the possibility of contradiction, as it seems to me, that ordinary muscular contraction is immediately due to the presence and stimulating action of nervous force, that the energy of muscular contraction is directly proportionate to the amount of that force expended on the contracting muscles, and that, therefore, Dr. Bland Radcliffe's dictum—viz., that "there is reason to believe that ordinary muscular contraction is associated with the deprivation of nervous influence, and not with a contrary state of things," is completely confuted and proved to be diametrically opposite to the truth by a large number of pathological experiments which each physician can verify for himself.

As already stated, Dr. Radcliffe's pathology of convulsive affections, and the principles which he asserts ought to become our guides in treating them, are the logical consequences of his doctrine of the functional relations of the nervous to the muscular system; it is evident, therefore, that if that doctrine is proved to be untrue, the whole pathological and therapeutical system evolved from it is untrue also. If so, it is obvious that the sooner the practical application of the system is abandoned the better; for methods of treatment diametrically opposite to those dictated by correct physiological and pathological principles while proving unsuccessful may, in some cases, be attended with danger. Indeed, I am glad to be able to say that practically the theory in question has been given up by Dr. Bland Radcliffe himself. While at its bidding he says—"there is reason to believe that the therapeutics of convulsion must be based upon the notion that vital power has to be reinforced," he, in his last published volume, wholly ignores the use of iron for this purpose in the treatment of epilepsy. This is the more remarkable, as in his lectures delivered at the College of Physicians, and which are said to constitute this volume, he (if my memory is not very treacherous) complimented the President, Sir Thomas Watson, on his wisdom in prescribing iron in cases of epilepsy, on the ground that this practice truly foreshadowed "the therapeutics of convulsion," which the lecturer's theory had at length fully revealed. What can be the reason, it will be asked, for this astonishing omission of iron—one of the most powerful agents which can be employed when "vital power has to be reinforced"—from the list of remedies mentioned by Dr. Radcliffe in his revised and published lectures? The answer is simple, the omission is merely one of the many instances in which, in his practice, the philosopher is faithless to his principles. As a matter of fact Dr. Radcliffe found that iron does not prove beneficial to epileptics, and therefore despite his hypothesis he has ceased to prescribe it. But this practical desertion of his therapeutical doctrine is very far from denoting the full measure of his infidelity: it is in the copious administration of bromide of potassium, that he shows implicitly his complete abandonment of his long cherished theory.

The experiments of Dr. Hammond, of New York, prove that this salt exerts an extraordinay power in lessening the circulation of the blood in, and therefore the nutrition and vigour of the brain. A French physician, whose name I cannot now recal, has published evidence that in many cases this same drug lessens the virile power so effectively as in some cases to abolish it; and Dr. Radcliffe, himself, quotes from Dr. Pereira's "Materia Medica" the following remarkable testimony to the powerfully sedative and devitalizing effects on the nervous system of bromide of potassium. M. Huette states, he says, "that this compound possesses narcotic and anæsthetic powers of a very peculiar and energetic kind; if from three to four ounces, in doses gradually increased from ten to twenty scruples, be taken within a period of fifteen days, a dull headache is the first effect; stupor and drowsiness soon follow. This is interrupted by delirium, resembling the incoherence of idiotcy, mingled with hallucinations. The muscular strength rapidly gives way, and with it the general sensibility. The latter effect, however, is very seldom carried to any considerable degree, and the cases in which the bromide causes sufficient insensibility to admit of surgical operation being performed are very rare. It cannot, therefore, replace ether or chloroform. The symptoms above-described continue as long as the use of the medicine; but the functions of organic life are not changed, and the effects rapidly subside under the use of purgatives. One effect is peculiar: even in small doses it rapidly and completely annihilates the sensibility of the pharynx and

velum palati to such an extent that these parts may be tickled without exciting the least effort at deglutition." Dr. Bland Radcliffe then adds :—"This latter effect is not unfrequently produced by the doses necessary to produce a favourable impression in cases of epilepsy, by doses say of fifteen grains, three times a-day, and therefore it is possible that it may be necessary to assume some specific action upon the medulla oblongata, or upon the nerves belonging to this centre, in order to explain the *modus operandi* of the bromide."

Such is the medicine given by Dr. Radcliffe in cases when, according to his teaching, "vital power has to be reinforced." I need scarcely say, with what peculiar satisfaction I observe, in this instance, how greatly the doctor transcends his doctrine. "Consistency," says Emerson, "is the hobgoblin of little minds;" happily it has not terrified Dr. Radcliffe : when going to battle with convulsive affections, he bravely strips himself of his theory, leaves it behind him, and as his chief weapon, puts his trust in one of the most powerful *sedatives* of the nervous system.

(To be continued.)

CONTRIBUTIONS TO CLINICAL SURGERY.

By WILLIAM HARGRAVE,

SURGEON TO THE CITY OF DUBLIN HOSPITAL, PROFESSOR OF SURGERY, MEMBER OF COUNCIL AND EX-PRESIDENT OF THE ROYAL COLLEGE OF SURGEONS.

TETANUS FOLLOWING AMPUTATION OF THE BREAST IN THE FEMALE.

Reported by the Resident Pupil, Mr. CHARLES G. LYSTER.

Case 1.—Anne B., æt. 48 years ; married ; had six children, all healthy ; occupation, washerwoman ; residence in Great Clarence-place ; always had been a healthy woman. Catamenia regular till the time of its ceasing about seven years ago ; was always a very temperate person, never knew of cancer to have attacked any one of her relatives. Admitted into the City of Dublin Hospital on the 29th June, 1866. Previous to being admitted she came to the dispensary to get advice for her right arm and side, which, for some time past, had been becoming more and more numb. She then mentioned to Dr. Hargrave about the lump in her breast, when he at once pronounced it as that of cancer, and took her under his care.

The tumour, on examination, presented a very hard appearance, and involved the entire of the left mamma. There were several large veins crossing down the breast, and presenting a very livid appearance, also congested. It first came on by a small kernel about the size of a nut, more than two years ago. Never experienced any pain in the seat of the disease, till within about the last five weeks, when she occasionally had slight lancinating stings now and then through the affected breast. The nipple has a hard indurated appearance, and is on a level with the surrounding parts.

July 6th.—The patient being placed successfully under the influence of chloroform, and not by a large dose, the tumour was removed by Dr. Hargrave by two semilunar incisions which commenced high up in the axilla, and enabled him to remove with rapidity the entire breast ; he next extirpated *all* the glands in the axilla, which exposed the axillary surface of the capsule of the shoulder joint. After the operation the wound was freely sponged with a solution of chloride of zinc, scruple ad unciam aq., which caused no distress. An opiate draught of mur. morphiæ with sp. am. arom. syrup and camphor julep was administered ; when in bed pulse 72, and quite composed. The patient continued to improve most satisfactorily for *ten days* after the operation ; pulse ranging from 96 to 110 ; natural as to rhythm, beat, and fulness ; the wound was daily dressed, with sponge compresses, effectually preventing the lodgment of matter in the axilla ; diet six ounces of wine daily, strong beef tea, and occasionally a chop for dinner ; egg, tea with bread and butter for breakfast, and tea and bread and butter at night ; an anodyne every night træ opii, spiriti am. arom. træ zingiberis and camphor julep.

On the 15th of July, nine days after the operation, unfavourable symptoms set in. In the morning they began by the patient complaining of great weakness, accompanied by a stiffness in her neck, which Dr. Hargrave at once pronounced to be the decided symptoms of tetanus. The next morning, the *tenth* from the operation, the case was a well marked one of traumatic tetanus. The sterno cleido mastoid muscles have become very rigid. She was ordered the following pills, one to be taken every third hour :—

℞ Ext. cannabis indicæ, gr. vi.
Pul. camph. redact. gr. ix. M.
Fiat massa in pilulas sex div cap i. tertiis horis.

She was ordered tobacco stupes over the abdomen, and opium ones over the wounded surface.

The patient found it impossible to swallow the pills, so she was ordered the following bolus, to be placed on the root of her tongue :—

℞ Pul. calomelanos, gr. ij.
„ Dover, gr. ij.
„ James, gr. ij. fiat bolus, ss.

She got enemas of strong beef tea, with a tablespoonful of whiskey to three ounces, to be repeated every three hours, also twenty grains of tobacco made into an infusion with eight ounces of water ; ℥j. of this to be given per rectum every hour.

On the 16th of July almost all the muscles became rigid. The countenance has assumed that haggard and anxious appearance generally accompanying tetanus. Dr. Hargrave seeing that the treatment so far had little or no effect on the progress of the disease, put her under the influence of chloroform, which had a most decided effect over the jerkings of the muscles ; he also directed the application of pounded ice and salt by means of the œsophagus of an ox, along the spine, which was maintained for three hours, the ice being renewed according as it melted ; pulse now 118 ; the appearance and character of the risus sardonicus, well marked.

17th.—Thirty drops of cannabis ind. were administered in an enema ; the disease unchecked terminating fatally at half-past three P.M. of this day.

The extreme rarity of tetanus following a surgical operation, in which no violence or unusual delay occurred, or loss of blood to any amount, fully justifies me in placing it on record. The history of the case was carefully noted by Mr. Lyster, and Mr. Nason, my dresser, the treatment after the operation by the former.

The occurrence of such a fatal complication was not anticipated by me, constituting one of the very rare cases of this affection (as recorded) following a clean cut wound. S. Cooper mentions a case following a similar operation of amputation of the breast ; also the case of the Earl of Darnley, who chopped off two of his toes with a clean hatchet ; also following a few cases of amputation of a limb, and one case of castration. This patient, who had always led a very temperate life, combined with unceasing industry as a washerwoman till the day of her admission into hospital, and the mother of six children ; her *morale* was good ; she was perfectly satisfied with the proposed operation. The extent of the incisions were considerable, passing far and high into the axilla, *of necessity* to facilitate the removal of the glands, which were all filled with cancerous deposits, though their external surfaces presented the appearance of healthy lymphatic glands, all of them were extirpated. The wound was well sponged with the solution of chloride of zinc to destroy any cancer cell that might have escaped the knife ; no uneasiness was experienced from the application. Everything went on most promisingly till the day specified in the report, the tenth from the operation ; the wound casting off a very superficial thin slough three days after the operation, which was produced by the chloride of zinc lotion, then presenting a most healthy surface discharging healthy pus. On the tenth day symptoms of tetanus began to be evident, gradually extending from the masseters and sterno-mastoid muscles till those of the trunk and extremities were affected. But a remarkable exception and contrast

in the intensity, severity, and duration of the spasms of the superior extremities was observed.

Those on the right side were comparatively feebly affected, while the opposite one was to a much greater degree; of the muscles of the left side the intensity of the spasms were concentrated on the muscles of the scapula, especially the serratus mag. anticus m., which consisted of incessant and rapid jerkings, with very short intermissions. For the twenty-four hours preceding dissolution the spasmodic actions of the serratus mag. anticus and levator angu. li scapulæ were incessant in elevating the shoulder. Except the temporary check following the administration of chloroform, these spasms were more the character of rapid jerkings than what is expressed by the term spasm.

The treatment proved the effects of cannibis indica, and tobacco enemata with it were nil, but the tobacco stupe applied to the abdomen caused a temporary relaxation in the muscles of the inferior maxilla. For the first time in treating this affection I directed cold by means of pounded ice to be applied to the spine, from the nape of the neck to the sacrum. It was very effectually managed by filling not to distension the œsophagus of an ox. Under its application the muscles of the lower jaw were so relaxed that the patient could open her mouth and take some nourishment and medicine, from which I augured favourably; but I was doomed to be disappointed, as the œsophagus burst during the night. When visited in the morning the cold was discontinued for want of a proper means for its application. From the partial benefit experienced in this case from the application of ice, every hospital can be independent of the tube afforded by the means now mentioned, by directing any of the vulcanised India-rubber houses to make a tube of that material, which can be rendered water-tight, sufficiently strong, and so thin as not to prevent the effects of cold. It is difficult to explain such a fatal termination to a clean incised wound. Could the weather have any influence? it being at the time intensely and most oppressively hot. Still, she was always carefully protected from a chill when the wound was being dressed.

MOST EXTENSIVE ECCHYMOSIS, AND SANGUINEOUS DEPOSIT, CAUSED BY A CRUSHING INJURY.

Case 2. William C., aged 48 years, married, occupation a carpenter, was admitted into City of Dublin Hospital on the 19th of June, 1866, suffering from the effects of a severe crushing he got between the step of a railway carriage and an adjacent wall at Kingstown.

On admission to hospital he complained of very great pain in his right hip, he also lost complete use of both inferior limbs, having no power to move them.

Dr. Hargrave saw him immediately after admission, and ordered the following liniment to be rubbed well into the side:

℞ Linimentum opii ℥iii.
Tinct. Canth. ℥ij.
Chlorof. ℥i.
Fiat. Linimentum.

He was also ordered a turpentine enema ss.

This treatment offered a perfect cure, as to the affection of the limbs, but then appeared an unusually large ecchymosis extending from the last rib to the thigh. After the discolourization had disappeared, a large fluctuating bag was found, which contained extravasated blood, extending from the last rib to the middle third of the thigh, and across from the coccyx to the groin. Was ordered

℞ Submur Hyd. gr. iii.
Pul. Antimo. g. ii.
Jalapæ ℥ss. ℳ.
Ut fiat pul. capiatur hora meridiana.

Cold applications were, in the first instance, applied to this large sanguineous tumour, which were found after a few days to in no way benefit or reduce the size of it; but produced a degree of chilliness, of which the patient complained, rendering him uncomfortable. This application was changed for the following one—cotton wadding, sufficiently large to cover the entire of the tumour, was well soaked in olive oil, then applied to it, covered with guttapercha tissue, all well supported by a broad flannel pelvic and femoral bandage; from this dressing the patient experienced much relief, and never after suffered from any chill; it was continued daily for one week, then every second one for another week, finally every seventy-two hours, till he was discharged. This treatment had the desired effect in completely causing the absorption of the entire of the effused blood into this sanguineous sac or bag; after five weeks of the application of the cotton wadding and oil, the patient left the hospital quite recovered.

Sanguineous tumours of the magnitude presented by this patient are of rare occurrence, and that without injury being inflicted on the integuments; the elasticity, strength, and toughness preserving their integrity, but, from the nature of the injury, causing them to glide over the subjacent tissues, as the cellular membrane and fibrous structures; a large detachment of the former is thus separated from the latter, leaving an empty cavity, which is immediately filled with extravasated blood and serum.

This case is valuable, not alone in its pathological characters, but also in enforcing the practical precept—*e.g.*, when cold applications are disagreeable to the patient's feelings, *though no chill* accompanies them, to change to those of the opposite kind, which, as the rule, are attended with satisfactory and successful results.

COMPOUND FRACTURE OF THE TIBIA AND FIBULA, PRESENTING AN UNUSUAL RESULT.

Case 3. John M., aged 21 years; single; residence 9, Denzille-street, was admitted into City of Dublin Hospital on the 21st June, 1866, suffering from a compound fracture of the tibia and fibula.

History of Accident.—He states that in the act of making a jump from off a bridge some sixteen feet high, his right foot was caught in a railing that was attached to the bridge, in so doing he lost his balance, and in trying to recover it he came with all his might on his left leg, not having had sufficient time to get the right foot under him. He received a compound fracture of both bones at the upper part of the lower third; when he was admitted to hospital the tibia was protruding through the skin. The limb was put up in McIntyre's splint. After a few days a large slough came away, and a large piece of the tibia, in size as large as a five-shilling piece became exposed. After some time straw splints were applied to the side of the limb.

The wound was dressed every day with the following ointment:—

℞ Balsami Peruviani, ℥iss.
Tinct. opii, ℥ss.
Ungt. Cetacei, ℥iss. ℳ.
Fiat Ungt.

On the 22nd July, thirty days after the accident, complete union of both bones had taken place, though the ulcer on the leg is still very large, and the bones appear as if they were going to throw off a sequestrum. The limb is now slung in the cradle. The patient never complained of pain in the limb, and has got up flesh considerably since his admission into hospital.

Aug. 15th.—The ulcer is gradually getting smaller. Complete union has taken place. Not the least deformity.

25th.—There was nitric acid applied to the bone to-day.

26th.—A great improvement by the nitric acid; bones throwing out healthy granulations. No appearance of exfoliation taking place.

Sept. 1.—Wound quite covered now with granulations. Patient getting on most satisfactorily.

This case presents a remarkable exception to the general experience derived from observing the phenomena of union in compound fractures, which necessitates the wound being healed before osseous consolidation takes place. In this instance union was obtained many weeks before the ulcer was healed, resulting from the compound fracture and the bones covered in by granulations, it being completed in thirty-one days from June 21st to July 22nd,

while the ulcer was not healed till the middle of September, when he left the hospital with a sound and strong leg.

In the modern treatment of fractures of the inferior extremities, much advantage and benefit have been obtained by slinging the fractured limb, which enables the patient to sit up with great comfort to himself, and protecting the pulmonary and cranial organs from congestions, sometimes followed by fatal results. This practice is considered by many to have been introduced by Mayor, of Geneva, about thirty years ago, and named by him hyponarthrasy; but it is really derived from Hippocrates, who practised and described it, which, after a lapse of more than two thousand years, has been introduced to the Profession by the Swiss Surgeon.—(*Vide* Hippocrates' Works, vol. ii., p. 485).

Lectures.

THE CROONIAN LECTURES
DELIVERED AT THE
ROYAL COLLEGE OF PHYSICIANS OF LONDON.

By Dr. ANDREW CLARK.

ABSTRACT OF LECTURE II.

Delivered Friday, 15th March.

The lecturer began by saying that the "grey granulation," plus the secondary local effects induced by it, constituted the complex state of lung characteristic of true tubercular phthisis. These effects were pneumonia, fibrous degeneration, fatty usure, and emphysema. By one or other, or several combined, the destruction of the tubercular lung was effected. There was no such thing as tubercular infiltration. The various forms of what was so designated were nothing more than the products of two different species of pneumonia. By itself, the grey granulation never killed. As we could avert its secondary effects, so could we retard the progress of the local disease, and prolong the patient's life.

In describing the microscopic characters of pulmonary "*grey granulation*," as seen *in situ*, Dr. Clark dwelt upon its correspondence to a vascular territory, its occasional capsulation by fibrous tissue, the appearance of a matrix suggestive of exudation, the presence of black pigment, the remarkable condition of the neighbouring lymphatics and blood-vessels, and the existence in the adjacent alveoli of proliferating cell-forms different from anything composing the granulation, and averred that no theory of the structural origin of tubercle could be satisfactory which did not account for these things. Dr. Clark next enumerated the elementary structural constituents of tubercle, and laid great stress on the presence of three different sorts of corpuscular or nuclear-like particles resembling the nuclei of epithelium, connective tissue and vessel, and on the comparative absence of fully-formed cells, the number of which held a direct relation to the youth of the patient, and the rapidity of the process of evolution. He then discussed, at length, the various theories by which the origin of the structural forms of the granulation was sought to be accounted for. To the exudation theory he objected that structural forms were found before any appearance of exudation; to Lebert's theory, that similar structural forms (though not in the same combinations or conditions) were found in non-tubercular products; to the epithelial theory, that the granulation arose often in parts where no epithelium was present—that in the young pulmonary granulation cells were absent, and that the epithelium-like cells existing in such numbers in the adjacent alveoli gave birth, not to a grey granulation, but to a cheesy deposit; and to Virchow's theory of the origin of the granulation in the exclusively endogenous proliferation of connective tissue corpuscles, he objected, on the score of error and inadequacy, but held that the theory embodied sufficient truth to form a cardial element in another hypothesis.

Dr. Clark ascribed the structural origin of the granulation to the multiplication by division of the nuclear elements of all the tissues involved (but mainly of the lymphatics and blood-vessels), followed by exudation and occurring within the limits of an ultimate vascular territory. In the pulmonary alveoli he considered the order of local events to be as follows:—Rapid desquamation of epithelium, assuming its existence with liberation of nuclei; proliferation of *inter-capillary nuclei*, and of nuclei of the lymphatics and blood-vessels; differentiation of vascular wall back to point where terminal artery splits into capillaries; appearance of matrix by exudation, sometimes filling up the parts like wax, which has been poured, when melted, into a mould; occasional extravasation of blood, not unfrequently the development of a rude fibroid tissue around the granulation, which ceases to grow when it has fully occupied a vascular territory.

Dr. Clark considered that this order of events was set agoing by the transference to the part through the medium of the blood of the organic irritant operating under certain collateral conditions, such as certain constitutional states, deficient vascular distension, and imperfect expansion of lung.

Dr. Clark, before discussing the intimate nature of tubercle and its artificial induction by inoculation, venous injections, and the like, proceeded to consider the secondary local effects induced by the grey granulation.

Pneumonia was the chief agent of destruction in the phthisical lung. There were two forms of it: one, the rarer, in which the products of it were composed of particles like the colourless corpuscles of the blood; the other, the commoner, composed chiefly of epithelium-like cells in a state of active endogenous growth. The moleculo-fatty degeneration of these products to their epithelial character and to obliteration of adjacent blood-vessels and lymphatics. There were two forms of fibrous degeneration—one in which the tissue was well developed and abundantly nucleated, the other in which it was imperfectly developed. The particular form was determined by the habits, occupation, or constitution of the patient. Cases in which this degeneration took the lead were very slow in their progress, and extended over years. The fibrous degeneration began around the granulation or in the areolar tissue of neighbouring bronchi or blood-vessels, and from thence stole in upon the lung in various directions, leaving islets of alveoli, which underwent cheesy degeneration, and looked like yellow tubercles. Fatty usure was next described as indicated by the presence of white creamy-like deposits, of the size and form of carraway-seeds. It consisted of the transformation of accumulated epithelium-like cell into various-sized droplets of fluid fat, and usually issued in emphysema. The emphysema around tubercles Dr. Clark declared to be not dynamic or mechanical, but static or pathological. He did not deny the existence of a mere compensatory or mechanical emphysema, but declared his conviction, based upon experiment, that the majority of cases of emphysema were due to local structural changes in the alveoli, which he described.

LUMLEIAN LECTURES
DELIVERED AT THE
ROYAL COLLEGE OF PHYSICIANS OF LONDON.

By J. RUSSELL REYNOLDS, M.D.,

HOLME PROFESSOR OF CLINICAL MEDICINE IN UNIVERSITY COLLEGE, AND PHYSICIAN TO UNIVERSITY COLLEGE HOSPITAL.

LECTURE I.

The object of the lecturer was to show—first, that the medical profession acts in no exceptional manner when it has to deal with law, inasmuch as its whole business is the discovery and application of the laws of Nature. 2nd. That when its medical and legal professions come in contact, it is not because either of them disputes the existence of, or necessity for obedience to, the laws which it is the business

of the other to expound ; but because misapprehension has arisen with regard to the appreciation of the one, or the application of the other, in a particular case. 3rd. That differences of opinion exist in all departments of thought when regard is paid to any complex phenomena; and, that these differences are not greater in scientific than in unscientific matters, and not more pronounced in medico-legal investigation than in any other form of scientific inquiry. 4th. That scientific testimony must consist of both facts and opinions, and that the difference between these two elements of evidence is not so great as is sometimes imagined, inasmuch as the statement of scientific fact involves to some extent the element of opinion. 5th. That the conditions which give value to the statement of facts are threefold; (*a*) that they be observed, and in order that this may be the case, that they be "looked for;" (*b*) that they be well observed; and, hence, that the examiner be both informed and skilled; (*c*) that they be truthfully and exactly represented; and, hence, that the witness be honest. 6th. That "expert" evidence is, by these conditions, rendered necessary in regard of facts; but, that the difficulties thrown in the way of the medical expert are as great as they can be, owing to the nature of the case, the circumstances in which the medical examiner is placed, and the necessary conditions of human thought.

There is no human faculty more difficult to exercise fairly than the judicial, and this is so even when the circumstances which call for its operation are the most conducive to its healthy development. There is no faculty which is, perhaps, more easily abused when the conditions are unfavourable ; and the circumstances in which a medical witness is sometimes placed are as unfavourable as can be conceived. He is called in to see a patient, or a party, who, if not treated unfairly at all, believes or represents such to be the case ; usually many conferences, and much legal correspondence have already taken place ; the individual or individuals supposed to be aggressed throw what is said on the opposite side, and often carefully conceal much of it ; they know their own weak points, and hide them ; they are aware of their strong points, and bring them prominently forward, or dexterously and simply take pains that they shall be seen ; they are primed to the full with all that tells on their own conclusion, and ignore carefully all that might count against it.

His tale is an *ex parte* one of injury done or about to be inflicted ; the objections raised by the other side—viz., those which are communicated, are often tortured and exaggerated ; this story is, or may be, consistent with itself, and with the facts that can be observed ; and if, in its telling, it is not over-done, and the other doctors appealed to with apparent frankness, and a few complimentary speeches as to his knowledge and candour, and with the utterance of an earnest wish that he would "simply express his opinion, whatever it may be," he may, in rare instances, take the opposite side, in still rarer will he, or can he, hold the balance evenly, while in many—with the most upright of intentions—he takes some bias not necessarily in opinion, but in his observation of the facts. He sees the case, not of choice but of necessity, from a particular point of view, and from that point he may fail to see all that it contains, all that bears upon it. There is no dishonesty in this, although there may be weakness ; something might be done to alter the circumstances, as I hope to show hereafter, but under the circumstances, which the physician cannot alter, he is placed at a disadvantage.

Let it be remembered that truth, or at all events all the truth, is not always with either the one or the other side, that indeed it not unfrequently lies somewhere between the two—a little on this side or that of the line which is about to be drawn—and that sometimes the line is one which, on purely scientific grounds, the medical witness would not be disposed to draw ; further, it must be remembered that even an *ex parte* statement may be correct, and may be legitimate up to the line that has to be drawn ; that with all the apparent strong conviction there may be an equally apparent integrity of purpose, and that this may be entered into and found in accordance with all the facts then to be observed, and under such circumstances it is still more difficult, nay, it may be impossible, for the physician to act judicially upon the whole case. Some facts, or reputed facts, are beyond his immediate cognizance. The account given of them may tally with what he sees, and thus they influence his observation upon the case. Under circumstances of this kind I have described, and they are by no means rare, the medical examiner has great difficulty to contend with. He must start from some ground, and that ground is given him. Some people are so contradictious in their temperament that they always fly to the opposite extreme of that which is suggested to them, and in doing so usually make more blunders than it would take another life-time to set right again ; but the majority, by a law of their nature, start from the point at which they find themselves, and, if honest in their purpose, come to the truth. The physician may be so directed as to omit a search for facts, which, with another direction, he might have looked for ; but his conduct may be as honest as his wish, and his omission was simply due to some portion of the case having been kept out of sight.

Honesty of observation is but gained, I think, by placing ourself in opposition to one's own pet theories, and endeavouring to ascertain all the facts which might militate against them. It is hard to do this fairly, but yet it may be done; when done, however, it will not prevent the evil then alluded to, the necessary lies as to facts in a doubtful case. Few men could so play at chess, the right hand against the left, as to ensure a long succession of drawn games; few can hold the balance so fairly as to be influenced only for the right by everything they hear and see, &c., but all can exercise their faculties to the highest point of honour, and this I believe in the vast majority, even of discordant cases, has been done by the members of our noble Profession. The discrepancies that have arisen have not, with infinite rarity, been done to any dishonesty of purpose, but have occurred simply from a want of proper knowledge of scientific facts, and from the absence of knowledge of the actual facts of the case under consideration.

7th. That the introduction of "opinion" into medical evidence is necessary because the questions raised can only be determined by regard to either the past or the future—*i.e.*, to either the *cause* of symptoms, or their probable *result*. 8th. That in the search after cause, and in the attempt to estimate effects, the examiner and the witness pass into a region of thought altogether different from that which they occupy when observing and detailing facts. 9th. That the difficulties in the exercise of such mental processes are, under all circumstances, weighty, and that they are sometimes insurmountable; but that, 10th, in certain cases which form the topics of medico-legal investigation they are as great as it is possible for them to be, and are such as cannot be overcome. This is so, because medical science, in its present state, is not in a position to determine the precise state of relation or right of sundry concurrent causes; it is unable to foretell with certainty the result of many injuries or diseases, the present condition of which it may appreciate ; and yet, further, with regard to a considerable number, its power of prediction is reduced to a simple guess. The statement of a statistical result may be true, and of real value for the appreciation of the fraction of a large group of cases, but its most minute expression may be untrue, and worse than valueless to the individual.

DR. RICHARDSON announces a course of lectures on Experimental and Practical Medicine, to be delivered on the first Tuesday of every month except July, August, and September. The subjects of the lecture to be given on the 2nd April are, a new Styptic and Adhesive Fluid, "Styptic Colloid," and Healing by the First Intention.

A CORRESPONDENT of the new paper, *The Day*, suggests that Fenianism, with its various "circles" and its "head centre" is a sort of political ringworm, which it may be found very difficult, indeed, to cure. The idea is not a nice one, but it may be true.

CLINICAL LECTURES

DELIVERED IN

STEEVENS' HOSPITAL,

TOGETHER WITH

OBSERVATIONS ON PRACTICAL MEDICINE.

By Sir HENRY MARSH, M.D., Bart.,

PHYSICIAN IN ORDINARY TO THE QUEEN IN IRELAND.

Edited by J. STANNUS HUGHES, M.D., F.R.C.S.I.,

PROFESSOR OF SURGERY IN THE ROYAL COLLEGE OF SURGEONS IN IRELAND, SURGEON TO THE LORD LIEUTENANT'S HOUSEHOLD.

OBSERVATIONS ON THE HEMORRHAGES.

(Continued from page 269.)

THE hemorrhages of incoming and outgoing fever are as distinct, the one from the other, both theoretically and therapeutically, as any two symptoms can well be.

Here, however, we must carefully avoid confusion; we must endeavour (the diagnosis is not always an easy one) to distinguish between the bleeding of exhalation and that of ulceration. In many fevers, intestinal ulceration with hemorrhage marks their advanced period.

In all the hemorrhages this is a most important point of distinction; in none more than in the uterine; in truth, it is the pivot on which the treatment mainly turns. The same remark applies to epistaxis.

A gentleman, aged 56 or 57, who had just returned from the Continent, told me that, for the previous five weeks, he had been harassed with repeated attacks of epistaxis; not a day passed without a frequent dropping of blood from the nose; he was afraid to drive out, to take part in public meetings; all his pleasures and pursuits were interfered with and spoiled; often on awaking he found his pillow stained with blood; he never lost much at a time, and was rather annoyed and distressed than materially debilitated. He had never till then bled from the nose, nor had he ever before been subject to any form or variety of hemorrhage. This fact led to a minute local examination, and then it was that the true source of the bleeding was discovered. A vascular spot of ulceration, difficult at first to see, became apparent. A few applications of the actual cautery completely cured the epistaxis. This gentleman had been, for five weeks previously, subjected to cuppings at the back of the neck, astringents, applications of ice, saline aperients, and all sorts of dietetic restrictions. The cause of the oversight was, that he had never felt nor complained of any local pain or uneasiness.

I have met with several cases, in many points identical with that now detailed. Nay, I have seen cases of nasal polypi and consequent epistaxis treated constitutionally, the local source of the bleeding having been left wholly unexplored. Such an oversight redounds not much to the glory of medical sagacity. In epistaxis, as well as in all other hemorrhages, a most searching analysis, local and constitutional, is required, to prevent the grave diagnostic error of confounding a hemorrhage which results from local disease, ulcer, or injury, with that which springs from a constitutional cause. Obvious as all this is, it is surprising how often such an oversight is committed.

What advantage can possibly arise from treatment exclusively constitutional, in cases of uterine ulcerations or polypi, or retained placenta, or other purely local sources of hemorrhage? When, however, as it often happens, ulcerations are co-existent with the hemorrhagic diathesis, the treatment, both local and constitutional, is imperatively indicated. So it is with epistaxis: if locally caused it will not be constitutionally cured.

One of the most frightful cases of epistaxis I ever witnessed occurred in a case of organic disease of the heart. The gentleman was between thirty and forty years of age, upwards of six feet high, with very expanded chest, and great muscular development. He was born in a tropical clime, and ardent in all his passions as the sun under whose burning rays he was nurtured. Hypertrophy of the heart, with disease of all its valves, to an extent such as I had never before nor since witnessed, was the fearful disease under which he laboured. In no instance have I heard the cardiac impulse at so great a distance from the chest. In no instance have I seen so extensive an undulation of the parietes of the left thorax and epigastrium, and elevation and sinking of the clothes that lay on the chest. In no instance has the stethoscope been inpinged against my ear with so much force. I was urgently requested to go without delay to see this gentleman; I found him bleeding in torrents from both nostrils; he had been thus bleeding for hours before my visit; the quantity of blood extravasated was enormous. Before I left the house the hemorrhage had abated. An intelligent medical pupil, a friend of his own, remained with him. The bleeding returned with so much violence that his friend, apprehensive of fatal consequences, was induced to plug both nostrils, from the posterior nares, with plugs well steeped in oil of turpentine; after some time heat and tingling were produced, soon, burning pain, which increased so much that it became necessary to remove the plugs; even after their removal the pain increased so as to be absolutely maddening. He lived for several weeks, but never afterwards bled from the nose. Probably, as a consequence of the action of the turpentine, the membrane remained permanently thickened, so as to render future bleeding improbable.

Possibly, in some persons of hemorrhagic diathesis, a state of the membrane, analogous to that produced here by the application of turpentine, may naturally exist and impede the flow, which would otherwise take place from the mucous surface of the nares.

I have repeatedly heard some, who were harassed with deep flushings, headachs, facial eruptions, heat of head and face, say, they would give the world to bleed from the nose, and they had all the sensations, such as heat, tingling, turgescence of vessels, throbbing, and redness, which very often precede and forewarn a flow of blood from the nares.

In these cases I have known much mitigation of symptoms to ensue after the repeated application of leeches to the septum. This method of leeching, some are too irritable to endure. In a very few it has produced violent sneezing. As a general rule, it is, in suitable cases, an excellent method of abstracting blood. A useful hint may be derived from the action of the turpentine; although, in this case, it was too violently applied. This gentleman died from the sudden rupture of one of the tendinous chords of the mitral valve. The sound of the rupture was audible to himself. It occurred in a moment of anger and indignation; he had been most unkindly treated by one who should have been the last so to treat him. From the moment of the rupture he was in agonies; they endured for six hours, when he expired. The heart was preserved in the museum of the Park-street School of Medicine, and was one of the most valuable preparations amongst those of that excellent pathological collection. This is one amongst numerous instances of a temporary epistaxis caused by an organic disease.

Disease of the brain is not unfrequently accompanied by this symptom. In the month of December last I was sent for in haste to see a lady in her fifty-eight year, who suddenly, and without any premonition, was, whilst sitting at dinner, seized with severe epistaxis; this was her first, and, up to the present time, her last hemorrhagic seizure. It was preceded by obscure signs of cerebral disease. Since the attack of epistaxis the evidences of gradually increasing organic disease of the brain are unequivocal.

The following case of a single occurrence of epistaxis may (as illustrative of the subject) be worth placing on record: Mr. S., between fifty-five and fifty-eight years of age, of low stature, large head, short neck, very large chest and trunk, with comparatively diminutive extremities, has been for years subject to that chronic form of bronchitis and habitual catarrh, which abates during the summer, but never wholly departs, accompanied by expectoration, and an habitually restricted and wheezing respiration. He retired to rest in the winter season with a more than usual

amount of thoracic oppression. He slept heavily, but unrefreshingly. Early in the morning he awoke, with intense headach and throbbing of the vessels of the head, heat, and flushing. Soon blood began to flow from both nares, and that to a very considerable amount. Finding that from the natural blood-flow no prompt relief was derived, and that the head symptoms were becoming even more urgent, I determined to open a vein in the arm. He was raised in bed: a full stream of blood issued from the orifice. I remained with him, and allowed the blood to flow till the force of the cardiac and arterial impulses was subdued. He became slightly faintish; the epistaxis ceased, and every urgent symptom was speedily relieved.

Before taking a final leave of that part of the subject which relates to the occasional and temporary conditions of the vascular system, which give rise to epistaxis, a few words may be devoted to the consideration of one of its very frequent varieties, which, conjoined with other hemorrhages, holds a prominent position amongst the symptoms indicative of a remarkable change in the texture of the blood, a change of which sea-scurvy and purpura are the clearest types.

Sea-scurvy is primarily the result of a nutriment either deficient in quantity, or injurious in quality, generally of both. This altered condition of the blood, and its consequence, hemorrhage, may arise from purely dietetic causes. It is a remarkable fact, that this change in the structure of the blood is accompanied by a corresponding change in that of the solids. The gums become spongy and bleeding. Ulcers are readily produced, and refuse to heal. Old and perhaps long-healed sores re-ulcerate; previously united fractures disunite; the muscles are enfeebled; and the brain and nerves, not deriving from the blood a full organic supply, are prostrated in function; the spirits are miserably depressed; the will loses its influence, and death is preferred to intellectual or muscular labour; also, blood oozes from many surfaces, frequently from the nares, and the effluvium emanating from the breath and person is often highly fetid.

In contemplating the causes of sea-scurvy, it is necessary to take into account the tedium and monotony of a seafaring life. These, I am informed by persons who have spent weeks and months without ever seeing land, are most irksome and depressing. Hence, the sudden and extraordinary restorative effects of exhilaration of the spirits. The sight of land, the prospect of plentiful supplies of wholesome and vegetable food, by raising the spirits, by improving the nervous and respiratory functions, go far in promoting recovery, even before these supplies come into operation. Hence, too, the important rule, that it is the duty of those in command in long voyages, to provide for the ship's crew not only ample supplies of wholesome food, but also such varied amusements as shall render the time spent on the ocean less wearisome, tedious, and monotonous.

During the late famine, many patients, affected with purpura, presenting all the signs of sea-scurvy, were admitted into the wards of Steevens' hospital. They did not belong to the class of the destitute.

I learned that their whole sustenance was limited to a very stinted allowance of wheaten bread. Weak tea they took in large quantities. No butter, scarcely any milk, and very little sugar. Some partook largely of weak and adulterated coffee. The sensation of want and emptiness from insufficiency of solid food, was in a measure counteracted by drinking in large quantities these weak infusions. Thus an insufficient and watery diet, too scantily supplying the staminal principles necessary to effect a perfect sanguification, is capable of giving rise to all the distressing symptoms by which purpura is characterized, and amongst them to many forms of hemorrhage, including epistaxis. In these cases we may aver, that there are simultaneously softening of the blood and softening of the solids. Such cases of purpura, if not too far advanced, are perfectly curable. The treatment is mainly dietetic. The vegetable acids materially assist in restoring a healthy sanguification. In the hospital we have given, with good effect, to these patients cold infusion of Peruvian bark, mixed in equal proportion with lime-juice, having added, in many cases, the citrate of quina, and as much substantial food as an enfeebled stomach could with facility digest. A few of these cases which resisted treatment evinced before death signs of dropsical effusions, as if to show how an abnormal condition of blood leads first to effusions of coloured blood, then to effusions of uncoloured blood, often to both combinedly, and also to prove how intimately connected the one with the other are the passive hemorrhages and dropsical effusions.

The epidemic and fatal dysentery, or, as it has not inaptly been termed, bloody flux, which has lately and during former famines swept hundreds away, is mainly referable to deteroriation of the circulating fluid, caused by insufficient and unsuitable nutriment. Its origin is dietetic and the most efficient item in the treatment is likewise dietetic.

(To be continued.)

Hospital Reports.

LONDON HOSPITAL.

TABLE OF ACCIDENTS ADMITTED INTO THE LONDON HOSPITAL DURING THE WEEKS JANUARY 22-29, FEBRUARY 12-19, AND FROM MARCH 5-12.

	Jan. 22-29.	Feb. 12-19.	March 5-12.
Fract. tibia and fibula	8	2	1
Compound „ „	2		1
Fract. fibula	1	1	2
„ femur	1 shaft	2 neck	2 neck.
Potts' fracture	0	0	1
Compd. fracture of skull	2 1 trephined	0	0
Fract. ribs	2	2	4
Retention		1	1
Burns and scalds	4	2	0
Local inflammations after injury	10	1	4
Lacerations	9	8	9
Incised throat	0	0	1
Punct. wound of abdomen	0	1	1
Orchitis		1	1
Contusions		7	3
Admitted as out-patients	365	283	238

Of the fractures of tibia and fibula admitted during the first week, four of the simple, and one of the compound ones were owing to the slippery state of the streets in consequence of the frozen rain on January 22nd. The total number of casualties owing to this cause was 82.

Of the cases of fractured ribs admitted in the last week, one patient, a boy of 17, had fallen from a cart and had fractured several ribs on the left side; was found to have also a fracture of the pelvis; he had hæmaturia for the first day after admission, and the anterior part of the crest of the ilium on left side was moveable, the measurement from the anterior superior spine to the knee being half an inch less on this side. He has had an attack of double pneumonia affecting all the posterior part of both lungs, from which he is recovering satisfactorily.

One case of comminuted fracture of the clavicle was admitted, as being caused by direct violence, there was a possibility of damage to parts beneath, and the inner fragment projected so as almost to come through the skin. The deformity could only be reduced when the patient lay on his back; the arm was bound to the side with a pad in the axilla.

There were also a few other cases of smashed fingers and toes admitted, but nothing of any general interest. One case of compound comminuted depressed fracture of skull has already been published; the other fracture of the skull was simply a fissure, and produced no symptoms whatever.

One of the cases taken in as a contusion was of some interest. The patient came first on Sunday evening, Feb. 19th, stating that she had slipped down some steps and

struck her back on the day previous. On examining it there was found a red circular patch, having a hard brawny feel, and softening in the centre, and looked exactly like a patch of inflammatory effusion passing into suppuration. As the woman's statement, however, was in favour of its being effused blood she was kept at rest with a warm fomentation applied; but in two days it burst and discharged about a pint of pus, and quickly healed.

ST. GEORGE'S HOSPITAL.

OPERATION FOR VARICOSE VEINS.

Under the care of Mr. HENRY LEE.

Lucy W., æt. 32, was operated upon on Feb. 28th for varicose veins, which were greatly enlarged both above and below the knee. The interest of the case consisted in the patient having been operated upon two years ago in another hospital without being in any material degree relieved. Mr. Henry Lee remarked that there were two cases now in the hospital in which operations had been performed upon varicose veins, and in which the patients had apparently derived very little benefit from the proceeding. Mr. Lee was naturally anxious to know what operation had been performed in those cases, and upon inquiry it was found that in the first instance the enlarged vein had been compressed between two needles, and in the present case a needle had been placed under the vein at five different points, and a piece of bougie in each situation pressed firmly down upon the vein by means of "8" ligatures. These needles were allowed to remain in three weeks, but when the patient walked about afterwards the inconvenience was found to be as great as before the operation. Mr. Lee believed that both these modes of operating were based upon a false pathological theory, and one which was, nevertheless, to be found in some of the most recent works on surgery. It was supposed if the opposed surfaces of an artery or of a vein were pressed together for a certain time that they would adhere by means of effused lymph, as two opposed serous membranes would do.

Now, theoretically, according to the best authenticated and most recent experiments, this ought not to happen; and, practically, it was found, as in the cases alluded to, not to occur. There was here a point of contact between science and art where those both spoke the same language.

In order to produce a permanent obliteration of a vein its coats, Mr. Lee believed, must be divided, and then a vascular union would take place from opposite sides, and this was the operation which he always performed. In the case of Lucy W., this operation was now performed both above and below the knee on the internal suphena vein, the divided portions of vein being isolated from the rest of the circulation by accupressure needles. Mr. Lee remarked that if gentlemen would watch the case they would have an opportunity of seeing the difference, as uttered by nature, between the results of simply compressing a vein and effects of dividing it in the manner which he had done.

Reviews.

THE ARREST AND PREVENTION OF CHOLERA. By A. E. Sansom, M.B.Lond. London: John Churchill and Sons.

Dr. Sansom has succeeded in clearly expressing his views on the nature of cholera in a work of very moderate compass. This very condensation, however, renders his contribution all the more valuable; for, too often, the really *original matter* contained in larger books is to the reader as scarce as are ears of corn to the gleaner in a well garnered field.

Dr. Sansom considers that cholera is caused by living germs, and that these act in a two-fold manner, primarily by irritation of the mucous lining of the alimentary canal; and, secondly, by causing irritation of the sympathetic system.

The treatment advised is, of course, based on the pathology. It must, in the main, be an "eliminative," or what the author considers even a better plan, "to kill the germs" by certain agents, especially sulphate of soda. After the attempt to kill and expel the germs, should the purging still persist, Dr. Sansom considers it should be checked, as it is an evidence of the remaining germ transmuted to an irritant poison on the great sympathetic nerve.

Now, although it is quite possible that cholera may be caused by the organised living germs described by Dr. Sansom, we must remember that such view is at present but an hypothesis demanding clearer proof than we at present possess. It may be forthcoming. Awaiting it, however, we must not be misled into the possible error (in encouraging an eliminative process) of augmenting the dangers of the disease. The chapter on the Pathology of the Sympathetic Nerve is very interesting and clear. The lecture on Disinfecting and Decomposing Agents is most valuable. In short, we commend this little work to all interested in the matter of epidemic diseases.

HISTORICAL SKETCH OF THE EDINBURGH ANATOMICAL SCHOOL. By John Struthers, M.D., &c. Professor of Anatomy in the University of Aberdeen. Edinburgh. 8vo. 1867.

To such of our readers as feel an interest in the biographical and antiquarian literature of our profession, few books will prove more acceptable than this very readable work of Dr. Struthers, who has herein shown himself well qualified for the task which he has undertaken. If we mistake not, the substance of this volume appeared first in the pages of our valued contemporary, the *Edinburgh Medical Journal*. We have here sketches of the three Monro's, John, and Sir Charles, Bell; Barclay, Gordon, Innes, Fyfe, Alexander Walker, Craigie, Cullen, and Knox; and a perusal of them, and of the other matters detailed by Dr. Struthers, cannot fail to interest even the non-medical literati.

EDINBURGH MEDICAL JOURNAL. March. 1867.

The current number of our contemporary contains five original communications by Drs. Patrick Heron Watson, William Jeffrey, Alexander Milne, David Skae, and William M. Dobie, respectively; several good reviews, and an interesting amount of miscellaneous matter, including a very readable obituary of that lamented physician, the late Dr. Scoresby Jackson.

ON DISEASES OF THE SKIN, including the Exanthemata. By Ferdinand Hebra, M.D., &c. Vol. I. Translated and edited [for the new Sydenham Society], by C. Hilton Fagge, M.D., &c. 8vo. 1866.

The professional reputation of Professor Hebra is so well known to every medical man of education in these countries, that we not only have no occasion to criticise the excellence of this or any other work of his, but his very name is a sure guarantee to our readers that his book must be a good one; and so it is. We feel that the work of a reviewer is at times difficult enough in endeavouring to pass an opinion on some of the works published by the new Sydenham Society, and for this reason, the books are in general works of repute, and it is the translation and editing which in fairness ought to be reviewed and not the original work. Professor Hebra's work differs, however, from many of these books just adverted to in two important particulars. The author has himself re-written for this edition Chapters V. and VI., on the affections of the glandular organs of the skin, and the greater part of Chapter XV. of which herpes is the subject; and he has also read over every sheet of the translation, and (observes the translator) "every passage in which I felt any doubt as to the faithfulness of the translation, or as to the sense of the original, was underlined by me, and has been accepted by him, or corrected so as to convey the right meaning."

The editor mentions a fact which he says "will be deemed of interest in reference to the writings of Willan." Professor Hebra quotes from a German translation of a work of Willan published at Breslau in 1799:—

"Now (continues Dr. Fagge) the earliest treatise on diseases of the skin by the great English dermatologist, contained in any of the large medical libraries in London, is the quarto dated 1808; and the only reference I have been able to find to any previous work of his on this subject is the statement that the Fothergillian gold medal had been awarded to him in the year

1790, by the Medical Society of London, for a classification of Cutaneous Affections. It would, therefore, seem that a publication, which was at the time deemed worthy of translation into German, has fallen into complete oblivion, having, no doubt, been eclipsed by the well-known later writings of its author."

The note on page 15, to which Dr. Fagge refers, is one from the editor, who comments on Hebra's mention of Willan's "Phlyctis" by saying: "In the English work 'On Cutaneous Diseases' (Vol. I., Introduction, p. 13), Willan mentions the Phlyzacium, the Psydracium, the Achor, and the Cerion or Favus, but not the Phlyctis."

Now, we have the best reason for asserting that the editor is incorrect in the above deduction. The usual London logic, that if a thing be not in the great city it cannot be found anywhere, may be very good in its place, but certainly not here. The book which, because it cannot be found in the large medical libraries in London, "has fallen into complete oblivion," can be easily read in the library of the King and Queen's College of Physicians in Dublin. It was published in London in 1798, and establishes the fact that Hebra correctly connects the Phlyctis with Willan's name. The old book in question refers to the award of the Fothergillian gold medal to its writer; and is doubtless the volume which was translated into German, and published at Breslau in 1799.

This volume before us runs over 396 8vo pages, and comprizes XV. Chapters. It is only the first part of the complete work; the remainder is promised before the end of the present year. In this short notice it would be unfair to the author and to the editor to attempt anything like a critical review of the entire volume; we may, however, remark on the translation, that it is to a large extent free from those intolerable Germanisms which make books so treated as this has been, almost intolerable to the patience of the mere English reader. It may be read with comfort, and even with interest, by those who feel little interest in the subject matter discussed in it; while, to the reader who may have a special liking for the subject of dermatology, it will not fail to bring very much *new* information of the most useful kind. The table of contents will, however, stagger the English reader a little. He will find some awful jaw-breakers, in the form of words having a terrible and unusual sound; but he will soon discover that they are grand names for very plain things. He will have to become familiar with "active hyperæmiæ," "symptomatic passive hyperæmiæ," "bromidrosis," "hyperidrosis," "anidrosis," "galactidrosis," "chronic exudative dermatoses," and many other words of this sort; but these once mastered, his task will be an easy one. Chapter I. treats of the General Pathology and Symptomatology of Cutaneous Diseases under these three heads:—Primary symptoms or forms of efflorescence; secondary symptoms; and, on the distribution of eruptions over the skin. Chapter II. treats of diagnosis, etiology, treatment, and classification; and on p. 48 the reader finds the classification which dermatologists have long known as Hebra's, and which appeared more than a year ago in an English dress on p. 14 of Dr. Belcher's edition of Neligan "On Diseases of the Skin." Chapter III. treats of the first of Hebra's classes—"hyperæmiæ cutaneæ"-diseases of the skin, which arise from the presence of an excess of blood in the capillary vessels of the cutis; Chapter IV. treats of the second class—"anæmiæ cutaneæ; and Chapter V. begins the discussion of class three—"anomaliæ secretionis glandularum cutanearum:" diseases due to perverted states of the secretions of the cutaneous glands.

That portion of the work which begins on p. 74 under the heading "Affections produced by morbid states of the materia perspiration," is especially worth reading, for it has been long identifid with the name of Hebra, and no more full descriptions or discussions on such diseaser or conditions, as bromidrosis, hyperidrosis, and anidrosis can be found, than we have read in this volume.

As regards the treatment of persons suffering from fœtid perspiration of the feet, Professor Hebra advises, in the first place, the removal of the shoes and stockings, and all other matters which may have become impregnated with the fœtor. When this has been accomplished, the procedure is as follows (we quote from p. 89):—

"A certain quantity of the simple diachylon plaister (emp. plumbi. emp, lichargyri) is to be melted over a gentle fire, and an equal weight of linseed oil is then to be incorporated with it, the product being stirred till a homogeneous mass is produced, sufficiently adhesive not to crumble readily to pieces. This is then to be spread over a piece of linen, measuring about a square foot. The foot of the patient haing been first well washed, and thoroughly dried, is now to be rapped in the dressing thus prepared. Pledgets of lint, on which the same ointment has been spread, are also to be introduced into the space between each pair of toes, to prevent their touching one another, and care must be taken that the foot is completely covered, and that the dressing is accurately in contact with the skin. When this has been done, an ordinary sock or stocking may be put on the foot, and out-side this a new shoe, which must be light, and should not cover the dorsum of the foot. After twelve hours the dressing is to be removed, the foot is then not to be washed, but must be rubbed with a dry cloth, or some one of the above named powders ["starch, lycopodium, powdered asbestos, almond bran (mandelkleie), or even common flour," p. 89], may be applied to it. The dressing is then to be removed in the same way as before, and its application is afterwards to be repeated twice a-day. This procedure must be continued for from eight to twelve days, according to the severity of the case. During this time, however, the patient need not keep his room, but may go on with his business as usual. At the end of this period the dressing and pledgets are to be removed, the foot is to be again rubbed with some pulverulent substance, and the patient may then be allowed to wear his ordinary shoes and stockings." He then specifies other particulars of minor importance, remarking that in some "quite exceptional cases" the whole procedure must be gone through a second time; and he adds, "but this will certainly, and without exception, bring about a cure." Professor Hebra has practised this method "for more than twenty years, and in many hundred cases."

Chapter VIII. contains one of the most valuable treatises in existence on morbilli or measles. This was originally written by the late Dr. Franz Mayr, clinical professor of the diseases of children in the St. Anna Hospital at Vienna; and it is now revised, and in fact re-written, by Professor Hebra. Chapter IX., incorrectly printed at the head of the chapter (see p. 188) as Chapter VIII., which was also written by Mayr, and revised by Hebra, is an equally valuable treatise on scarlatina; and perhaps not the least valuable part of it is the diagnostic table between measles and scarlatina, which commences on p. 220, and specifies the diagnosis between these two affections, A in the stadium prodromorum; B in the stadium eruptionis; C in the stadium floritionis; and D in the stadium desquamationis. Chapter X. is an exhaustive tractate on small-pox; Chapter XI. on cow-pox; and Chapter XII. comprises erythema, pellagra (by Mayr); acrodynia, roseola, and urticaria. Chapter XIII. is "on the dermatitides proper." Chapter XIV., containing the subject of Chapter XIII., treats of erysipelas, "dermatitis plegmonosa," or plegmonous inflammation of the skin; glanders; the pustular affection produced by the cadaveric poison; and pustula maligna. Chapter XV. deals with the important subject, herpes, a word of which Hebra accepts the definition of Willan; also with miliaria, and with acute pemphigus. While the portion of this chapter devoted to herpes is quite exhaustive, that allotted to acute pemphigus is, in our opinion, very meagre, especially when compared with the others already mentioned.

For the reasons already stated, we do not propose to enter into any criticism of this most able book. To ordinary practitioners there will always be too much of the foreign spirit and element found in and about it, to render it a hand-book on diseases of the skin; but to such as feel a peculiar interest in the subject with which it deals we cannot commend it too highly; not by any means, however, being understood to approve of all opinions expressed in it, even by such an authority as Hebra. As to the "get up" of the work, if all copies are such as that sent to us, it may be well to say another word to the reader. By some strange mistake pp. 353–384, both inclusive, are bound in between pp. 32 and 33, while there is a corresponding gap at the end, p. 385 following immediately after p. 352. This should be remedied in the unbound copies; and such as have copies like ours should make the necessary correction in order to avoid confusion in reading and reference.

A MANUAL OF THE PRINCIPLES OF SURGERY, BASED ON PATHOLOGY, FOR STUDENTS. By William Canniff, M.D., New York, M.R.C.S.E., late Professor of General Pathology and the Principles and Practice of Surgery in the University of Toronto, &c. Pp. 402. Philadelphia: Lindsay and Blakiston. 1866.

Dr. Canniff, who dates his preface from Belleville, in West Canada, and who appears to have enjoyed great opportunity, for obtaining surgical experience, both in civil and military practice, states that he originally prepared the present volume

as a hand-book for the use of students while he was engaged in lecturing on the Principles and Practice of Surgery, but that since he withdrew from that duty he has extended the limits of the work, so as to make it more generally useful. The ground-work is derived from his own course of lectures, and these again are based upon the best European authorities on surgical pathology. The manual is arranged into five divisions, the first of which is devoted to Inflammation and the Diseases arising out of Inflammation; the second to the Healing Process and the Diseases of the Healing Process, as Ulcers; the third to External Injuries, as Contusions and Wounds; the fourth to Diseases of certain Tissues, Bones, Joints, Arteries, and Veins; and the fifth to Morbid Growths.

In the pathological views expressed, as well as in the recommendation of treatment, Dr. Canniff has taken as his guides the leading authorities of the present day, and his therapeutical precepts are cautiously deduced from a well-balanced consideration of modern doctrines, verified by his own experience. The antiphlogistic treatment of inflammation, for instance, especially by general bleeding and the free administration of mercurials, is called into question, and the preference is given to the use of opium, the employment of stimulants, and the administration of the veratrum viride. This last-named drug, the potency of which is unquestionable, has, as is well known, a high reputation with transatlantic practitioners, and it is now introduced into the forthcoming British Pharmacopœia. Dr. Canniff writes of it in eulogistic terms as a remedy for inflammation; but we cannot say that his illustrations of its peculiar efficacy in inflammation of the lung, are, to our mind, perfectly convincing. He gives two cases of pneumonia, both caused by gunshot injuries to the chest, in which he conceives that the administration of the veratrum viride was a powerful curative agent; but when we recollect the numerous kinds of treatment recommended for pneumonia, all of which are said to have been successful, and when we recollect, moreover, that pneumonia will sometimes be cured with little or no treatment by drugs, we are inclined to be sceptical as to the merits of the green hellebore, which, however, deserves a trial. In the treatment of syphilis, mercury is considered by Dr. Canniff to be efficacious, but to be more dangerous than iodide of potassium, and he recommends the latter to be first tried before recourse is had to the former. The work of Dr. Canniff is altogether creditable as a Manual of the Principles of Surgery.

The Medical Press and Circular.

"SALUS POPULI SUPREMA LEX."

REGISTERED FOR TRANSMISSION ABROAD.

WEDNESDAY, MARCH 27, 1867.

INSANITY IN THE PROBATE AND DIVORCE COURT.

AMONG the most important social duties which a man or woman may be called upon to perform during the journey of life, are the contraction of a marriage and the making of a will. The former step, unwisely, even if not unlawfully, taken, too often leads to misery and useless repentance on the part of those who enter into the contract; the latter, while it confers no advantage on the testator or testatrix, too frequently leaves upon survivors a sting which years are powerless to remove; it alienates property to which relatives have a moral if not a legal right, or it confers upon strangers what is withheld from lineal or collateral descendants. But whatever may be the miseries resulting from ill-assorted marriages, the parties who contract them must bear the punishment, provided that both the man and the woman in each case are competent to execute any lawful act; and whatever may be the hardship endured by wives, or sisters, or children, deprived by the last will of their husbands, their brothers, or their parents, of what they may regard as their rightful expectations, they must anticipate no redress, and unless they can prove testamentary incapacity, must bear their sorrows and their disappointments in silence. But the law very properly insists that either in the contraction of a marriage, or in the execution of a will, the principal agents should be of competent intellectual capacity to understand what they are doing; and the records of the Probate Court abound with instances in which the question of testamentary capacity or incapacity has given rise to lengthy and expensive litigation. It is by no means so frequent that the validity of a marriage is contested on this ground; but a recent case in the Divorce Court affords an instance in point, and the observations we have just made are illustrated by the two decisions given by the Judge Ordinary (Sir JAMES WILDE) on the cases *Young* v. *Dendy*, and *Hancock* v. *Peaty*, last week.

In the former case, the will of a Miss DENDY was opposed on the ground of the insanity of the testatrix, and her brother was the defendant in the suit. The decision of the jury was in favour of the will, thus affirming that the lady was of sound testamentary capacity, and having the effect of alienating a very considerable property from the lady's own family. It may be mentioned that the evidence of insanity, though it was insufficient to convince the jury, was very strong indeed, and in fact the only question seemed to be, not whether the lady was insane or not, but whether she was insane at the time of making the will which was the subject of dispute. But the evidence in favour of the will went to show that she was of sound mind up to the time of her death.

The brother, however, being dissatisfied with the verdict, and additional evidence in favour of the insanity of his sister having been obtained since the trial, an application was made to the Judge Ordinary for a new trial, which has been granted. Sir JAMES WILDE, in giving judgment, evidently thought that those who propounded the will had endeavoured to prove too much, for after the death of the testatrix a number of papers had been discovered, which manifested the existence of delusions and trains of thought inconsistent with a healthy mind. The Judge seemed to think, therefore, that the insanity was clearly proved, and the issue to be raised at the next trial will be as to the period when the insane trains of thought were developed, and whether they existed at the time when the disputed will was executed.

In the other case in which judgment was given on

the same day by the same Judge—namely, the case *Hancock* v. *Peaty*, the very unusual question was raised as to the validity of a marriage contracted when one of the contracting parties was alleged to be insane. This case, it will be recollected, was tried without a jury, by which course, expensive as the suit has no doubt been to all the parties, much time, trouble, and expense have been saved, and a very able, learned, and satisfactory judgment has been obtained. The whole case is a very painful one, and it is extremely difficult to understand why it was brought into court at all, as none of the parties had any pecuniary interests at stake whichever way the matter was decided, and all of them must be involved in very considerable costs. It should also be mentioned that the husband, so far from being amenable to blame in his part of the transaction, is entitled to the very highest credit for his consistent kindness to the unfortunate lady whom he has made his wife, and whose insanity, at certain periods of her life at least, appears, by the evidence, to have been very strongly attested to. Indeed, she was placed in a lunatic asylum at the express instance of her husband.

The judgment of Sir James Wilde in this case is a model of judicial impartiality and fairness, and is characterized, moreover, by a spirit of kindness and sympathy for all the parties in the unfortunate suit. But his opinion is very strong indeed that at the period when the marriage was contracted, nay, on the very day when the ceremony was performed, the lady was not in such a state of mind as to enable her to enter legally into so solemn an engagement, and he therefore pronounces, though with an expression of regret, that the lady's relatives have established their position as to her incapacity to contract marriage. The Judge takes pains to review all the evidence on which his judgment is founded, and he specifies so many particulars as to eccentricity of conduct, that very few, we apprehend, will be found to question the conclusion at which he has arrived. But he intimates, that as the lady's husband asserts that she has now recovered, and is in a sound state of mind, there will be no decree of nullity of marriage until that question is settled, and if, upon investigation, he desires to try the point, the Divorce Court will give him every facility for the purpose. If recovery has actually resulted, the Judge states that there will be no decree except at the lady's own instigation, but if, on the contrary, the insanity continues, the Court will be prepared to act on the conclusion it has formed.

THE LONDON OBSTETRICAL SOCIETY AND MR. BAKER BROWN.

The Fellows of the Obstetrical Society are now in possession of certain extracts from the published matters concerning the operation of Clitoridectomy as proposed by Mr. Brown. These extracts are taken from various papers and articles that have lately appeared in the Medical Press and Circular, and therefore it is needless to refer to them. Appended to them are certain remarks of the Council, in which they point out on what (among numerous grievances contained in the said extracts) they specially rest the weight of their case. They also point out in the same remarks why Mr. Brown is not in a position to say anything that can be satisfactory to the Fellows in his own defence.

It is the duty of Mr. Brown to make a rejoinder, and show, if possible, that the charges are magnified through the irritation of his medical rivals, and that he has been actuated, on the whole, in what he has done by an earnest regard for the welfare of his patient, and the honour of his profession.

We wait for what he has to say in reply with anxiety, and we hope, in the interest of justice, that the Fellows who are for the moment jurors will candidly estimate what Mr. Brown may say in defence, and that they will let no feelings of jealousy or faction—and in questions ardently disputed, such feelings may obtain entrance into the minds of honourable men—interfere in any degree with the verdict that conscience will suggest. For ourselves, we propose to delay publishing any special criticisms on the charges against Mr. Brown.

This will give us the opportunity to hear the other side, as well as to avoid the invidiousness of making remarks on a pamphlet which, though printed and circulated among all the Fellows of a large Society, and which cannot possibly be therefore any secret to any member of the Profession, is yet called "private and confidential."

In this painful affair our main objections have been specially directed, not so much against the mere investigation of the charges, which may be proper enough if carried out in a right spirit, as against the manner in which these investigations have been actually effected. To us, we confess, it seemed a blow to the independence of the Profession and the honour of its individual members. "Private and confidential" seems the order of the day; "private and confidential" was the manner in which the charges were first composed; "private and confidential" the judges charge to the jury; "private and confidential" the manner in which the jurymen, each separate from the other, are requested to arrive at their determination; and "private and confidential," as well as rapid and decisive (for it must be done, says the *Lancet*, in one evening), the manner in which the sentence is to be given—the only public part about the whole proceeding being the disgrace and dishonour which may fall upon the character of one hitherto considered a respectable Fellow of the Society.

Notes on Current Topics.

St. Bartholomew's Hospital.—H.R.H. the Prince of Wales has accepted the Presidency of this ancient charity. Other changes than those we named last week have become necessary on the staff, in consequence of the retirement of Mr. Wormald, the senior surgeon. There seems to be some doubt whether the liberal course in respect to special departments, to which we alluded last week, will after all be carried out. It would, however, be very gratifying to find St. Bartholomew's leading the way, especially that it has just now secured the heir-apparent as President.

International Medical Congress.—We have been requested by the general secretary, M. Jaccoud, to announce that Dr. Beigel, of Finsbury-square, has been appointed as London Correspondent-Delegate of the Central Committee, and that he will be happy to receive the names of those gentlemen who may wish to take part in the forthcoming congress, of which we have already published the programme.

The Order of the Bath.—The *London Gazette* of the 15th instant contains a series of promotions, all of which are conferred for actual service before the enemy. Four military and five naval surgeons have been made C.B. The only complaint we have to make on the subject is against the niggardly manner in which distinctions are awarded to our profession. Do these nine promotions really represent fairly our due? Is it not strange that we have only one K.C.B. on the list, and that the profession is excluded altogether from the rank of G.C.B.? When will Governments appreciate the services of medicine and surgery?

Dr. Livingstone.—Nothing certain has yet transpired with regard to the report which reached this country of the death of the African explorer. There is still ground for fear that the report may be true, though, on the other hand, we may cling to the hope that Dr. Livingstone may yet be alive. It appears that no dependance can be placed on the evidence of the men who say that "they saw their leader dead," as it was found from other sources that they abandoned him when he was about to enter a Mazite-haunted district. "The case, therefore, must rest in awful suspense until some one of his faithful negro attendants, who, it is said, escaped the slaughter, shall return to confirm the tale of the Johanna men."

Railway Injuries and the Profession.—A case was tried before Lord Chief Justice Bovill, the other day, in which some points will no doubt be of particular interest to our readers. A young woman, named Marshall, proceeded against the North London Railway Company for damages on account of injuries sustained while a passenger on their line through alleged neglect of their servants. The most important feature of the case was, that both parties had agreed to accept the evidence of Mr. John Adams, the Senior Surgeon to the London Hospital, as to the injuries which the plaintiff had sustained, and that gentleman, therefore, gave evidence on the point. Certainly it is more creditable to the profession for one distinguished surgeon's testimony thus to decide a case than to witness, as we too often have done, an array of conflicting medical evidence retained on each side. There ought to be no difficulty in any case of this kind in accepting the impartial opinion of an experienced man, and, apart from the position he has long held at one of the largest of the London Hospitals, it is well known that Mr. Adams, as surgeon to several railway companies, has long enjoyed peculiar opportunities of forming an estimate of such cases. We are, therefore, very glad that in his summing up the Lord Chief Justice commended the course taken by the counsel on both sides in respect to their agreeing to accept the opinion of Mr. Adams, and suggested that it might form a very useful precedent. His Lordship added with great truth that "nothing could be more painful and perplexing in cases of this character than to have to determine upon the conflicting testimony of medical witnesses on both sides." One other point worthy of notice by professional readers is, that the company, with an illiberality in strange contrast with their conduct in the other part of the case, made a "bone of contention" of the surgeon's bill, which amounted to £60. It transpired that this gentleman, whose name we did not learn, lived fourteen miles from the patient. Each visit, therefore, involved a journey of twenty-eight miles, and as the attendance extended over a twelvemonth, it could not be considered heavy by any reasonable person. On this point also we are glad to find Lord Chief Justice Bovil disposed to act fairly by our Profession. He observed that "he did not think the jury would tax the surgeon's bill; he did not think the visits were too numerous; and the distance was so great that four or five hours were occupied on each occasion." Medical men have so often had occasion to complain in such matters that it is only just to signalize such an example of fair play. We sincerely hope it may be generally followed.

The Royal South Hants Infirmary.—The controversy at Southampton, to which we have more than once directed attention, continues to rage as acrimoniously as ever. The letter from Dr. Hearne, which appeared in our columns last week, is worthy of perusal by every one interested in the management of our provincial Hospitals. We are happy to accept Dr. Hearne's corrections as to matters of fact, as we should equally be open to correction from his opponents. As to matters of opinion we have several times expressed our views, which, if they do not exactly accord with those of either of the parties into which our Southampton brethren are divided, accurately represent, we believe, the feelings of the immense majority of the profession. We should be very glad, indeed, to find both parties abandon all personality, relinquish unkind suggestions respecting professional brethren, and unite their energies, to effect the reforms we have pronounced essential to the well-being of the charity.

The "Telegraph" on Experts.—Coarseness of language is not unfrequently assumed by a class of persons who desire to thrust their opinions down every one's throat, and whose chief delight is to "bully" the rest of the world into submission. Presuming upon the quietude with which many endure their presence, they are apt to indulge in vulgar abuse when least called for, and, without any occasion for suspicion, blurt forth accusations which, though a few meek men suffer in contemptuous silence, are a source of deep annoyance to others, and deserve severe reprehension. Unfounded charges against whole classes are safer to the utterer than those against individuals, but they concern the public press and must occasionally be noticed. The *Daily Telegraph*, in a leading article on a recent trial for

murder, last week indulged in an attack upon "experts" which it is not necessary to characterise. The veracious journal in question asserts that "there are certain ingenious chemical experts in London and elsewhere who can generally manage to find blood, or mud, or strychnine, or starch, or arsenic, or shellac, in anything that is submitted to them for analysis." The next paragraph speaks of "scientific witnesses, whose direct interest it is that their labours should secure a conviction." We protest against this wholesale accusation of crime against "chemical experts," and we are convinced that the assertions of the *Telegraph* will fail to satisfy the public that scientific witnesses are ready to perjure themselves for the sake of what, in such a case, would be worse than the word "blood-money" usually implies.

Edinburgh University.—There is a prospect that the Chair of Anatomy at this University will be filled by a worthy successor of the late lamented Goodsir. Among the likely candidates we have already heard of Professor Struthery, of Aberdeen; Mr. Turner, who for some time acted as Deputy for Professor Goodsir; Dr. J. B. Pettigrew, of the London College of Surgeons; Professor Redfern, of Belfast; and Professor Cleland, of Galway. We have no doubt that whoever may be selected will devote his best energies to sustain the reputation of the Chair.

The Medical Society of the College of Physicians in Ireland.—A special meeting of this Society will be held on Wednesday evening, the 27th, to receive and consider a series of reports from the several cholera hospitals of Dublin. Chair to be taken at half-past eight o'clock. The following resolution has been adopted by the Council of the Society:—"That on the special cholera night the time allowed for the reading of abstracts from the several reports, and in the debates thereon, to each member, be limited to ten minutes." We hope to lay before our readers a full report of the proceedings of this meeting in our next issue.

Public School Reforms.—A correspondent of the "*Sunday Times*" in a series of able letters has remarked upon the many reforms needed from a hygienic point of view in public schools. The letter upon the insufficiency of diet recalls vividly to our recollection the time when we were subjected to this unwholesome discipline. It is well understood by the profession that good nutritious food is essential to the development of the frame, and we are glad to see the point exciting attention in a popular journal.

The Royal Zoological Society of Ireland, in contemplation of purchasing some pelicans, have made inquiries as to the safest and best method of feeding them while on their sea voyage. Mr. Bartlett, the experienced superintendent of the Royal Zoological Society's Gardens at the Regent's Park, replies as follows:—"We have a fine Australian, which was fed upon the cuttings of poultry and other garbage from the butcher's shop. I lately sent some fish-eating birds out to India in charge of my son, and we sent on board a good stock of live frogs in a box of wet moss, a good number of live eels in a tub, almost without water (I find they live longest so packed), and I suggested, should the supply run short, to mix a few sardines in chopped meat, and I have heard he has succeeded in reaching Suez safely."

Nepotism in the Army Medical Service.—We observe in the Official list of Assistant-Surgeons gazetted to Regiments the following announcement, "Royal Horse Guards: Staff Assistant-Surgeon John Astley Bloxam to be Assistant-Surgeon, vice John C. Agnis deceased." The name of this gentleman appears in the list of candidates passed at the late Chelsea Examination, ranking fourth with a gross total of marks of 2120. In the ordinary course Mr. Bloxam should have passed this examination, and then proceeded to Netley Hospital for his probation of six months. He should then pass a second or promotion examination before being gazetted. This is the course which every other gentleman in the list will be obliged to pursue, but we understand that Mr. Bloxam has been permitted to enter Netley without the essential previous examination, and after his stay there, to present himself for the primary examination which he ought to have passed in the first instance. Furthermore, he is now gazetted without having gone in for the second or promotion examination at all, and, consequently, he is placed six months in seniority of those Medical Cadets who passed the same day as he did. We believe our information to be strictly correct, and if so, this gentleman's promotion is a very gross instance of official favouritism. It is simply "Remember Dowb" over again. Mr. Bloxam should not have been allowed to enter Netley without passing the primary examination; nor, having done so, to present himself for that examination at all; nor, on the strength of that examination, had he any right to be gazetted without the promotion examination, or to be promoted over the heads of his compeers as he has been. If the system of competitive promotion in the Army Medical Service is to be carried out only in the case of gentlemen who have no friends in Whitehall or Downing-street, the sooner its expensive machinery is laid by the better for the public service.

New Pharmaceutical Preparation.—Bedford's Cod Liver Oleine.—The unpleasant nauseating qualities of the common preparations of cod liver oil have created a demand for some less repulsive form in which to prescribe this valuable agent. Bedford's cod liver oleine is one of the preparations put forward with this object, and the patentees have fully succeeded in meeting this objection to the usual form of the oil. The therapeutic powers of Bedford's oleine have yet to be tested and approved, but its merits in respect to appearance and taste are manifest. It is a very elegant preparation, perfectly clear and inodorous, and with no more taste than is inseparable from any oil. We have tested it in practice, and find that it is taken readily, and never causes nausea. Our experience does not enable us to say whether its medicinal properties are in any respect deteriorated. It is still a moot question whether the oil itself or the iodine and other minor ingredients are of greatest therapeutic value, and we have no reason to believe that Bedford's oleine has lost in any of the essential principles in the process which converts it into so attractive a medicine.

If the Reform Bill now before Parliament become law, all graduates of any University in the United Kingdom and all medical practitioners registered under the Medical Act, will be admitted to the franchise. The University of London will also return a member. These certainly, even if there be none other, are good points in the measure.

Proceedings of Societies.

SURGICAL SOCIETY OF IRELAND.

March 1, 1867.

Dr. Butcher, President of the College, in the Chair.

CASE OF RECURRENT FIBRO-CYSTIC TUMOUR; FOURTH RECURRENCE IN THE SAME SITUATION.

Dr. Davys, of Swords, in presenting this specimen said—I have the honour to lay before the Society this evening a specimen of fibro-cystic tumour which I removed from the arm of a young woman, aged about 21 years, at my dispensary in Swords, on last Tuesday.

It occurred to me as a case not devoid of interest to bring before the Society this evening, inasmuch as this is the fourth time since February, 1865, that the patient underwent the operation of removal of a tumour, and from exactly the same position on the arm, about two inches above the external condyle of right humerus. In March, 1865, I had the honour of laying before the Society (as reported in The Medical Press of March 22 of same year) the specimen of the first large tumour removed. It then occupied the attention of the Society, and an interesting discussion ensued as to its being malignant or non-malignant; and as I observed that some of the surgeons present, to whose opinions I of course bow with all deference, were inclined to believe it malignant, I made it my special business to look after the subsequent history of the development of the tumour, and I must repeat my humble opinion again as to its being non-malignant. The patient from whom I removed the tumour now before you, and on whom Dr. Mapother also operated in St. Vincent's Hospital last December, is a stout healthy-looking young woman, presenting no cachectic features whatsoever, or evidence of glandular contamination. She observed, when about four weeks dismissed from St. Vincent's Hospital, that a tumour was reforming in the old cicatrix: I should add that on the 18th of May, previous to last December, I removed a tumour from the same place, and published the details of it in illustration, as to the operation, of the value of Richardson's Ether Spray Producer in nullifying all pain. The patient applied at my dispensary in Swords on 22nd of last month, when I was surprised to see that the tumour had so rapidly increased in size. I recommended her, as she is a pauper, to seek admission again into hospital, and as she positively refused to do so, and at the same time stating she did not for several weeks feel recovered from the effects of being put under influence of chloroform, I was induced, at the earnest solicitation of the patient and her friends, to remove the tumour. In doing so I again resorted to the ether spray, but I must say not with as good success as on 18th May previously, when on removing a tumour from the same arm, she assured me she felt no pain till sensibility of the parts was returning. This may be due to the greater size of the tumour on this occasion. Having made a long free incision over the tumour I removed it, or rather them, easily, as you may perceive smaller tumours surrounded the larger one. There was very little hæmorrhage. I regret I have not an opportunity of submitting a portion of the present tumour to a microscopical examination. The photographs I have the honour to submit were taken of the tumour and the patient a few days before its removal. They were executed with a great degree of care by the eminent photographer, Mr. Simonton, of 42, Grafton-street. Their very great accuracy in my opinion illustrates the great value of photography in similar cases.

Mr. Richardson said he had examined two of the former specimens exhibited by Dr. Davys. They were good examples of fibro-cellular tumours.

A CASE OF ACUTE LARYNGITIS

Was exhibited by Mr. Hargrave, who spoke as follows:—

Mr. President, the pathological specimen which I have the honour to present to the Society has some points of interest which are not unworthy of their consideration. It is the larynx of a man æt. 30, and married, who died of acute laryngitis in the City of Dublin Hospital. He was admitted into the hospital on the 18th February, Monday, suffering from this affection in a very acute form, accompanied with bronchitis. The breathing was very stridulous. He maintained himself in the erect position to assist his respiration, which, in the right lung was audible and natural, not so in the left which was feeble when compared with the right one; the chest was resonant; on looking at his countenance; there was no pallor, nor distress in dilatation of the alæ nasi, so constantly seen in severe attacks of laryngitis. The lips presented a natural colour, showing that sanguification was being healthily performed. On examining the epiglottis, it was soft and pliant, not rigid. The only place he complained of pain was immediately above the great cornuæ of the os hyoides.

The treatment consisted of *free* leeching in the vicinity of the os hyoides, poulticing after they fell off. Calomel and Dover's powder administered every third hour. These measures afforded great relief. In between twenty-four and thirty hours he was under the influence of mercury. On the 19th he was much improved in his breathing, and the stridor was much diminished. Continued the medicines, and strong beef-tea was given to him, having taken scarcely any nourishment before he came into hospital. On Thursday night, 19th, he was seized with sudden dyspnœa, which was much relieved by turpentine stupes round the neck. On the 20th and 21st, gums very sore, the mercury was discontinued. Chlorate of potash gargle, prescribed on the 22nd. Emp. vesicat lyttæ to the nape of the neck, to be afterwards dressed with ung. Hyd. and sabinæ. The linim. camph. co. to the anterior part of the throat. On the 23rd, at the morning visit, no improvement; symptoms stationary. He passed through this day as the day before; between 9 and 10 o'clock P.M. a sudden change was evident; breathing more difficult. During my unavoidable absence my colleagues, Messrs. Tufnell and Croly, kindly attended for me; no time was lost in deciding on the operation of tracheotomy, which was performed by Mr. Croly with some relief—the patient survived till 10 A.M. of the 24th. He lost very little blood during the performance of it. Post-mortem appearances.—The larynx, trachea, and lungs on being removed presented the following changes: the lungs were congested at their posterior and phrenic surfaces, more in the left than the right; the bronchi showed evidences of inflammation in their mucous membranes, the trachea was similarly affected; the larynx exhibited the epiglottis thickened, reduced in size and rigid, the cordæ vocales also thickened, and the sinuses of the larynx much diminished in depth, and considerable submucous œdema of the entire of the larynx. So far there was nothing unusual from the ordinary appearances of acute laryngitis; but on cutting down to the posterior part of the cricoid cartilage, an abscess was found over the entire of the cricoid posteriorly. It was opened. It contained very fœtid matter of a greenish colour, and was partly occupied by necrosed cartilage, also ossific formations into which the cartilage was being converted.

This occult abscess was the cause of the severity of the laryngeal affection under which the man finally succumbed. The notes of this case were carefully taken by Mr. Cranny, one of the resident pupils.

POPLITEAL ANEURISM; AMPUTATION; RECURRENCE OF THE DISEASE IN THE STUMP.

By Edward Hamilton.

Jeremiah Sheehan, aged 45, a pensioner, was admitted to Steevens' Hospital on the 22nd of February, presenting some remarkable symptoms. He sat up in the bed, propped with pillows, apparently suffering from oppression of breathing. His face was congested; his lips blue, and the general surface of the body was cold, and marked with dark spots of congestion, of a purpuric character. The pulse was very weak, almost imperceptible. The heart's action was extremely feeble, and its sounds indistinct. He

had undergone amputation of the right thigh, and the appearance of the stump was very peculiar. Its surface was discoloured, of a livid hue, which extended some distance up the abdomen; it was cold to the touch, and had a peculiar brawny tense feel; two small openings existed on its anterior surface, from which issued a slight oozing of dark fluid blood; they were plugged with coagula; no pulsation or bruit could be detected in it.

His general symptoms were considered to be due to advanced cardiac disease, rapidly approaching a fatal termination—the condition of the stump being attributed to the formation of a diffused false aneurism. During the examination he was moribund.

Stimulants were freely administered, but they failed to arouse the vital powers, and he died in a few hours after admission. It was with great difficulty, and only after patient investigation, that I was enabled to glean the following facts respecting his previous history:—

While in the army he was four months under treatment by compression for a popliteal aneurism, and was discharged uncured. Returning to Cork, his native county, he entered the South Infirmary early in June, remaining until August, when he left, against the remonstrance of his medical attendant (Dr. Tanner). He remained at home until November, when he entered the North Infirmary. This he also left without permission, and lived at home for a few weeks. He then was admitted to the Workhouse Hospital, where, as his comrade states, the limb "mortified." He was transferred to the South Infirmary, where his thigh was amputated by Dr. Tanner in December. He remained in hospital until last June, when he came to Dublin. He has since been most intemperate, constantly getting drunk and falling on the stump, and otherwise injuring it. I have been favoured, through the kindness of Dr. Edward Townsend, with the following particulars of the case while under his care in the workhouse, so far as he recollects them:—

"I found him in the Workhouse Hospital suffering from extravasation of blood, consequent on the bursting of a popliteal aneurism. As well as I recollect, his heart was very much enlarged, with well-marked double bruit, and the entire arterial system gave evidence of disease. He was removed by my direction to the General Hospital. At consultation I recommended amputation as the only chance left for the patient, and I think I felt it my duty to tell him at the same time that I feared he may not survive the operation."

On examining the stump, the entire superficial femoral was involved in a diffuse false aneurism burrowing through it. The profunda was healthy, and carried its blood for the nourishment of the parts. The cavity contained much laminated fibrine. I regret that I was not able to obtain the heart, which circumstances, over which I had no control, perverted me doing. His comrade states the stump did not cause him much trouble until about a fortnight before his admission.

They had now the stump before them, and they could see the pathological conditions that existed—viz., a very large diffused aneurism evidently involving the entire extent of what remained of the superficial femoral artery, while the deep femoral remained in its integrity, supplying and nourishing the limb. The profunda vein could be seen distinctly. The whole of the cavity was occupied by a mass of clotted blood, some fluid of course contained in the very centre.

On raising off the skin of the stump they could see the femoral trunk—the common femoral tolerably safe as far as regarded its bifurcation. They would observe a small piece of bougie in the profunda artery, which was perfect, and the vein also was perfect. The entire mass was filled up with clots of blood, a good deal of lymph and fibrine coagulum covering over and protecting the vessels.

He regretted that he had been unable to get the heart, but he thought it better to bring the case before the Society in its imperfect state rather than that it should be lost, as he thought it a case of some surgical interest.

Mr. Tufnell observed that Dr. Hamilton had called his attention to the fact that he saw this case two years ago. He was asked to see it in consultation with Dr. O'Flaherty in Dublin. It was an aneurism, the walls of which had receded until it had acquired about the dimensions of a blue plum. It remained at that size without becoming consolidated, and with a slight pulsation throughout it. Compression was kept up for a considerable time without any diminution or increase of the aneurism. The man was therefore allowed to walk about, and the tumour remained in a latent state—very much in the condition of the case under the care of Professor Porter—which ultimately got well. Another case under the late Mr. Smyly—viz., that of a man who was a schoolmaster, whose aneurism remained stationary for a long time, and then suddenly consolidated. Another case—that of a medical man who returned to his professional avocations in the country, and was riding when he felt some pain, put down his hand and found that the pulsation had ceased by detachment of the fibrine—recovered. This was a case of the same kind where the aneurism became lined with fibrine, leaving a small channel for the blood to pass through. He had lost sight of this man, and did not hear anything of the case until Dr. Hamilton called his attention to it, and told him that he intended to bring it forward. He wished to ask Dr. Hamilton if he heard any history of the man between the time of his leaving Dublin in 1865 and going into Steeven's Hospital; whether the secondary aneurism had been noticed in the meantime, and whether any treatment had been resorted to?

Dr. Fleming said this subject had been discussed so largely on former occasions, that it was unnecessay to enter into any details. With respect to the treatment of these cases he had some experience of the treatment adopted in the case of Dr. Molloy. He was treated in Steevens' Hospital under Mr. Cusack, and like a great many others, treated by compression, he got quite dissatisfied, and would not submit to its continuance, and when he left town all the local symptoms of aneurism were still present in the popliteal space.

Mr. Tufnell said that after Dr. Molloy returned home the aneurism was cured, and by some sudden effort in controlling his horse the fibrine got detatched. Mr. Molloy died afterwards, but the popliteal aneurism was cured before his death, and he died of aneurism of the aorta.

Dr. Banon said he saw the present case on the morning of the man's death. He was then in a moribund state, and no operative proceeding could have possibly been undertaken. He should wish to ask Mr. Hamilton this question. Supposing the arterial system was in a better state, and the man possessed of sufficient vitality, was there room to tie the superficial femoral, or would he have to tie the deep femoral or adopt any operative proceeding?

Dr. Hamilton said he believed the man had received no treatment after he left Dublin, and as far as he could learn he had not suffered much until a fortnight before he was admitted to Steevens' Hospital. Thus there was a tumour formed, and some slight bleeding from the openings on the face of the stump. With respect to the question of Dr. Banon, he was sure he would agree with him, that operative proceedings were out of the question in this case. In the first place there was no bleeding; the man was not dying of hæmorrhage, but rather of cardiac disease in a very advanced condition. Then taking into account the state of his arterial system, it would be unsafe to tie an artery when an aneurismal tumour had formed in it twice. In other cases it might be the duty of the surgeon to give the patient a chance for life by tying the external iliac, rather than the common femoral. It was always advisable to go as far as possible from where the disease had been formed in an artery, and if the patient's condition had admitted of it, it would have been their duty to give him what little chance the ligature of the iliac vessel would afford. But that was out of the question in this case.

GUTTA-PERCHA URINAL FOR INVALIDS.

Mr. TUFNELL exhibited a urinal, which he said he had found very useful in a case which had been seen by the President during life. It was an instrument which gave a great deal of relief to the unfortunate individual who necessitated its invention, and as it might be found useful in similar cases he thought it desirable to bring it under the notice of the Society. The patient was an old gentleman, between 70 and 80 years of age, the subject of prostatic disease, the subject of stricture, and of abscess in the prostate, with small calculi in the bladder which came away during life, afflicted with enlarged testicles and tumid scrotum, and had a very short penis. The consequence of this was very severe suffering. The thickened bladder was unable to contain much urine at a time, and as soon as the patient obtained a little sleep the urine dribbled away, passing over the scrotum and integuments of the groin; but if he awoke, the moment he attempted to expel the water, from the shortness of the penis, it spouted upwards, just as the water might be observed coming from the pipes in the street when the water-cock was opened. The urine passed over the pubis and down the thighs, producing a vast amount of suffering. Every kind of urinal was tried for this unfortunate gentleman, but totally without effect. The size of the scrotum was such, that the penis became, as it were, rudimentary, and there was no means of attaching an urinal to it. Mr. Tufnell, with the assistance of Mr. Robertson of Batchelor's-walk, made the rough-looking instrument they saw before them. This gutta-percha apparatus was moulded over the thighs and the pubis, and made so that the penis and scrotum could pass into the upper opening. This aperture was plugged with raw cotton, and then the scrotum being well lubricated with an opiate ointment, the urine was conveyed away through the india-rubber tube, which passed through a hole in the bed, communicating with a vessel placed below. There was no valve in the instrument. The urine, as soon as it was emitted into this apparatus, instead of passing backwards, went into the tube and was carried away, and contributed months of comfort to the individual. Mr. Tufnell showed the bladder, and observed that it did not contain a single calculus after death, although during life several small ones had come away.

The PRESIDENT thought the suggestion thrown out by Mr. Tufnell for the construction of a urinal to meet such distressing cases as that he had described was most important. There was not a member of the Society who had not met with cases where, from old age, a paralysed condition of the bladder, and the penis shrivelled up and small, with the scrotum in an œdematous state, there was the greatest difficulty in preventing the water from trickling down the thighs and getting round to the back, scalding, teasing, and irritating the patient. The unfortunate subject of such an affliction was in a state of constant suffering, bed sores formed quickly, and the case was aggravated in every way. He had himself used several kinds of apparatus in such cases. In using the apparatus now before them, it would be necessary that the scrotum should be anointed to prevent the water irritating the scrotum; but if the water was prevented from dribbling down by a mechanical appliance of this kind, the patient's suffering would certainly be relieved in a marked way, and his life might be prolonged by preventing the death of the parts which would otherwise take place by sloughing. He knew nothing more difficult when the penis became shrivelled than to provide for the catching of the water. There were urinals invented for the penis, but in these cases there was no way of attaching it.

Dr. F. KIRKPATRICK said he had an old gentleman under his care at present, eighty years of age, who required the use of the catheter twice a-day. He had the infirmity referred to by Dr. Tufnell, and every apparatus to be procured in Dublin had been tried, but without effect. It was found impossible to keep him dry. He mentioned this to show how very necessary was some invention such as that exhibited by Dr. Tufnell. He had found, however, by experience, that when any part was enclosed in gutta-percha, the skin became soon excoriated, and he was afraid therefore the use of this instrument could not be long continued.

Dr. TUFNELL observed that if there was a free admission of air, the excoriation of the skin would not take place, and he showed that in the apparatus which he had contrived, there was an opening at the top to allow the natural evaporation of the body to escape.

The PRESIDENT repeated that the great object was to keep the urine away from the sacrum and the back. There were numbers of urinals which were very effective in many cases, but for such cases as that described by Dr Tufnell this apparatus appeared to be most suitable.

Dr. STAPLETON observed that the anointing of the scrotum was troublesome, and he thought would produce irritation. He would prefer to dust the scrotum with lycopodium which he thought would be equally effectual in causing the water to run off. As had been observed, gutta-percha kept in the heat and the natural moisture. Decomposing urine would generate ammonia, which would certainly irritate the parts.

The PRESIDENT said there could be no difficulty in keeping the urinal properly cleansed and free from ammonia. The grand point was to keep the water away from the back.

FEMORAL HERNIA OF UNUSUALLY LARGE SIZE.

Dr. FLEMING exhibited a drawing of femoral hernia of very unusual size in connection with the cast of the case of Mr. Colles, brought under the notice of the Society at a late meeting by Dr. Edward Hamilton. The subject of the drawing was a woman, aged beyond thirty years. She had been operated upon some few years previously for strangulated femoral hernia, and was subsequently most careless in wearing a truss, when, ultimately she was obliged to lay it aside altogether. On her application to Dr. Fleming, the hernia presented the appearance of an irregularly oblong tumour occupying the right inguinal region, passing somewhat over Poupart's ligament, and extending down to the centre of the thigh. The integuments at its most depending portion were inflamed and ulcerated, and in such condition, she was admittted into the Richmond Hospital. The essential features of the hernia were unmistakeable. It was partially reducible, and contained intestine and large packeted masses of omentum. Its coverings in some portions were remarkably thinned, and the ulceration present was angry and irritable. The usual symptoms attendant on such class of hernia were present, and were specially distressing from any neglect in dietary or improper support of the projecting mass. The drawing is most truthful. The situation and appearance of the cicatrised integument, the size and course of the hernia, and the absence of any venous congestion beneath it are most accurately delineated—all tending to confirm the statements of Mr. Hamilton, and illustrating, as he remarked, the extraordinary accommodating powers of nature.

A bag truss, with a suitable lacing provision, gave great comfort to the woman.

The PRESIDENT observed that it was extraordinary that so large a tumour could exist without venous congestion. The pendulous character of the tumour was also unusual.

HYDROCELE OF THE NECK.

Dr. FLEMING also exhibited a drawing of a remarkable case of hydrocele of the neck in a boy, aged 18 years. He gave a short outline of the prominent features of the case, and stated that details would be reported hereafter. Attached to the drawing was a sketch of the appearance of the fluid contained in the hydrocele. Cholesterine was present in large quantities in the fluid which was also shown.

The PRESIDENT said this case was one of considerable interest. It had many peculiarities. Its pendulous character was not usual. Then with regard to the supposed partitions in the tumour, that, too, was unusual. The inability to get transmission of light was not usual. These tumours were generally tense and tight, causing some difficulty in

making a diagnosis. The vascularity of the surface was also a peculiar feature.

Mr. Croly said that a child was brought to the City of Dublin Hospital with a tumour situated in the submaxillary region. It had a feel exactly like a venous nævus. The tumour was so tense and so much connected with the fascia of the neck that he could not isolate it sufficiently to try the translucency test. The mother stated that it appeared shortly after the child's birth. As he had great difficulty in coming to a correct diagnosis of the tumour, he made an exploratory puncture, and a quantity of fluid came out, which on microscopic examination was found to contain cholesterine and albumen. The tumour filled again, and when it became the size of an egg he put one of Chassaignac's tubes through it, and the case terminated favourably.

Mr. Collis had seen a good many cases of hydrocele of the neck, and as to the point mentioned by Mr. Fleming, of the subdivision of the tumour, he had seen it occur not unfrequently; and in one case in which he operated last year—the subject being a young child—the cyst of the tumour had become very considerably hardened by what, as far as he could judge, was a cartilaginous deposit in its walls. That was a point worth noting in the history of these cases. He had seen tumours of this kind treated in various ways, and he would mention one case in which a drainage tube was used. The fluid was at first clear, like the ordinary fluid in hydrocele, but in the course of two or three days it began to be discoloured, and the friends of the patient were rather alarmed by a considerable flow of blood from the tumour five days after the insertion of the drainage tube. The child was brought to him, and at first he thought some vessel must have given way, but on a more careful examination he was led to think this hæmorrhage was due to a general weeping, and not the giving way of any one vessel. On removing the drainage tube and washing out the cavity the hæmorrhage ceased. They were indebted to Mr. Fleming for bringing forward this case of hydrocele of the neck, as surgical literature was rather scanty on this subject. He had treated them in various ways, by injecting them, tubing them, and in one case by excision. They all recovered. The origin of the tumour was sometimes in an ordinary strumous gland when it began to soften and break up and fluid formed. Some of the largest tumours he had seen had originated in an ordinary strumous gland.

Dr. Fleming said that all the particulars noticed by the gentlemen who had spoken were detailed by authors in separate communications respecting the pathology of these tumours. Extreme mobility of the tumour was an index to its situation. When these tumours were placed superficial to the fascia, they might be moved in every direction. Some of these tumours were, strictly speaking, watery tumours. The watery tumour was accurately described by Sir Benjamin Brodie in his paper on watery cysts apparently connected with the liver. He also alluded to these watery cysts of the neck, which was frequently their seat, and in all those instances they were under the cervical fascia. In this case the tumour was quite superficial to the fascia, for so moveable was the tumour that they could pass the fingers behind it, and bring them almost together. He recollected an instance in which one of these tumours, apparently as innocent as this, was excised, and uncontrollable hæmorrhage took place within a short period after the operation, resulting in death. The integuments in the case under consideration were natural, with the exception of some small superficial veins on the surface of the tumour, but when the tension was removed by taking away the fluid the veins disappeared, and the colour of the integument was now as natural as that on any other part of the body, showing that this was a temporary effect produced by the tumour interfering with the venous circulation. With respect to translucency he had, in not a few instances, removed fluid exactly the colour of a strong infusion of coffee, perfectly black and filled with cholesterine. In sero-cystic tumours of the breast he had found the fluid sometimes quite dark. The difficulty of diagnosis in cases of hydrocele of the neck arose from the relation of the tumour to the fascia; if superficial to it differential diagnosis was easy.

MEDICAL SOCIETY OF LONDON.

Monday, March 18.

The new President, Mr Henry Smith, took the chair this evening, and delivered an address, of which the substance was as follows:—

He felt it a very pleasing duty to thank the Fellows of the Society for having elected him to the chair, and he did so not as a mere matter of form, but with sincerity, and under the conviction that the honour conferred upon him was a mark of the favourable opinion of the Fellows at large; and he knew of no greater pleasure in his career than to possess the good will and esteem of the Profession, and especially of those in it to whom his character and actions were well known. He could not forget, moreover, that the Medical Society of London had enjoyed a great reputation for its usefulness, and for the numbers of eminent men who had from time to time been in its ranks; and although the Society had had its vicissitudes, he was glad to find that it was now in a prosperous condition. He referred to the many excellent researches which had been originated at this Society in the form of the Lettsomian Lectures, which had subsequently been published, and had attained deserved repute. He also referred to the utility of the Society, especially for younger members of the Profession; as it was essentially a practical Society, and no opposition was placed in the way of any Fellow, however young, who wished to bring forward his views on any subject. He strongly urged the younger members of the Profession especially to join its ranks, and as a practical illustration of its benefit, he might appropriately, now he had been elected to the chair, state his own history in connection with it. The first act in his own professional career was to join this Society, and he had been an active and interested member ever since: he had here made and cemented many friendships, had greatly increased his professional knowledge, and had been able, either in the form of papers or of lectures, to bring before the Profession his own thoughts and observations on various matters of practical Surgery, which had subsequently been extended, and had been the means of forwarding his professional career. "Therefore," said he, in conclusion, "I have a right to think well of this Society; and when I look upon the long list of eminent men who have filled this chair, I cannot but feel a strong incentive to make myself worthy of them, worthy of you, and worthy of the honourable position to which you, gentlemen, in your kindness have elected me, and the duties of which I will fulfil to the utmost of my power."

HARVEIAN SOCIETY OF LONDON.

At a meeting of the Harveian Society's "Committee for the Prevention of Venereal Disease," present—Dr. J. E. Pollock, President; Dr. Broadbent, Mr. Coote, Mr. Curgenven, Dr. C. Drysdale, Mr. Dunn, Dr. T. Fox, Mr. Gascoyen, Mr. J. Lane, Dr. Maudsley, Dr. Menzies, Dr. Meredyth, and Mr. Sedgwick, it was stated by Mr. James Lane that the effect of the working of the Contagious Diseases Act of 1866 had already been most striking in the lessening of the frequency and severity of venereal disease among the women sent into the Lock Hospital from Woolwich, as also among the soldiers quartered there. Although the Act had come into operation only in October last, the amount of disease was already only half of what it had been, and consisted almost solely of cases of gonorrhœa. The healthy women were now examined as well as the diseased. Mr. Lane added, that it must not be expected that the results would be so marked if this system were carried out among the general population. There were

forty Government beds for prostitutes at the Lock Hospital at present.

Mr. Holmes Coote stated that the result of the examinations of prostitutes at Portsmouth had been equally remarkable. The effect of compelling infected women to remain in hospital until cured had been admirable; and he thought that to grant such a boon to the public service and withhold it from the general public was an anomaly. It was suggested by Dr. C. Drysdale and carried unanimously, that circulars should be sent to the senior surgeons of all large hospitals in London, in the provinces, and in Ireland and Scotland, requesting them to inform the committee concerning the daily number of venereal cases treated at their respective hospitals; as to the proportion which those bore to the whole of the surgical cases treated, and as to the number of beds in their hospitals set apart for venereal cases. The propriety of instituting a system of police surveillance of notorious prostitutes and of periodically examining these women was then discussed.

Dr. Pollock observed that general public opinion in this country, he believed, was much opposed to the introduction of such a system.

Dr. Maudsley said that the only cases that should be subjected to such interference should be those of *notorious prostitutes*.

Dr. Broadbent approved of the system and laws in force in Malta, which the Honorary Secretary had read aloud to the meeting from the Government report, and which had resulted in nearly extinguishing contagious venereal diseases in that island. The ordinance of 1861 of Malta runs thus:—

"*Article* 1. Any person, being notoriously a prostitute, shall be liable to be visited, three times in each month, by one of the police physicians, for the purpose of its being ascertained whether such person is affected with venereal disease. The visit shall be made in a place to be for that purpose appointed by the superintendent of police.

"2. The person referred to in the preceding article shall be summoned to appear for the purpose of being visited as aforesaid, by means of an order in writing, signed by the superintendent of police, and stating the time and place in which the visit shall be made. If she refuse, she shall be punished with imprisonment for a term not exceeding three months, to be remitted as soon as she shall consent. If the physician find her diseased, she shall be kept in custody until cured."

Mr. Gascoyen, Mr. James Lane, and Mr. Holmes Coote, were all in favour of similar regulations being carried out, and they observed that this was more necessary to the welfare of the women themselves than even for the men.

Mr. Sedgwick doubted the propriety of carrying out such measures.

Dr Meredyth strongly advocated the system of police surveillance existing in France.

Mr. R. W. Dunn also was in favour of forcible examinations of all prostitutes.

Dr. Menzies bore testimony to the value of such examinations from his own experience in the army.

After some debate, the following propositions were provisionally made:—

It was proposed by Mr. Holmes Coote, seconded by Dr. C. Drysdale, and carried unanimously—

(1). "That the present hospital accommodation for female venereal patients is perfectly inadequate."

(2). "That there should be sufficient district accommodation provided in all towns for the reception as in-patients of all women suffering from venereal disease."

Dr. Tilbury Fox considered that these two propositions would be readily acceded to by all who were acquainted with the existing state of things.

Mr. J. Lane said that the number of beds for venereal patients was quite inadequate, and only a portion of those who applied could be taken in.

Mr. Gascoyen dwelt upon the sufferings of the women, who were frequently obliged to continue their trade, even whilst suffering from severe ulcerations, owing to the present inadequate supply of beds.

The Honorary Secretary read the following extract from the report of the late V. D. Committee, which said—"The Committee would have more hesitation in so earnestly recommending a periodical examination of public prostitutes under the act, and their seclusion until cured, did they not believe that in so doing they are acting, not only in the interest of the community, but especially so in that of the women themselves, with whom their profession has taught them deeply to sympathise; and were they not, moreover, convinced that such examination in nowise involves the legalisation or, in any respect, the encouragement of vice."

Mr. Curgenven, who expressed himself in favour of police regulation of prostitution, thought that the Contagious Diseases Act of 1866 should be applied to the whole of the population of the country.

After some debate, the following motion made by Dr. Maudsley, and seconded by Dr. Broadbent, was carried as a provisional one, subject to approval at future meetings:

"That the *principle* of police surveillance of *notorious prostitutes* embodied in the Contagious Diseases Act of 1866 should be applied to the population generally."

The Committee invite suggestions, which are to be sent to the honorary secretaries,

C. R. Drysdale, M.D., 99, Southampton-row, W.C.

J. B. Curgenven. Esq., 11, Craven-hill Gardens, W., London.

Legal Intelligence.

HANCOCK *v.* PEATY.—JUDGMENT.

This was a suit instituted by the guardian of Mrs. Peaty, to have her marriage with the respondent, which took place on the 19th August, 1863, set aside on the ground that the lady was insane at the time the marriage was contracted. The learned Judge, in giving judgment, after going over all the facts of the case, stated that he did not intend at present to issue any decree, although, there could be no doubt that the lady had before and after her marriage, and, according to the evidence, on the very day of it, exhibited undoubted symptoms of insanity. But as Mr. Peaty asserts that his wife has now recovered and is in a sound state of mind, I do not propose to make a decree until the question is settled. If, upon investigation, he desires to have that question tried, the Court will give him every facility for that purpose. The suit was commenced by the petitioner, who claimed to act on the wife's behalf, on the ground of her being incompetent to act for herself, as long ago as July, 1866, and it may well be that between that period and the present she may have recovered. If this should prove to be the fact, the Court cannot proceed to a decree except at her own instance. If the insanity remains, the Court will be prepared to act upon the conclusions that it has formed.

Correspondence.

ABDOMINAL WOUNDS.

TO THE EDITOR OF THE MEDICAL PRESS AND CIRCULAR.

Sir,—Mr. Johnson's interesting and instructive case of protrusion of intestines through an abdominal wound, ending in recovery, which appears in the The Medical Press and Circular of March 6th, reminds me of a still more severe injury of that kind which came under my own care here in April, 1852, and which also terminated in recovery, the particulars of which will be found by referring to the *Edinburgh Medical Journal* of July, 1852.

My patient, a boy of nine or ten years of age, is now a robust healthy man.—Yours, &c.

Archibald Blacklock.
Late Surgeon R.N.

Dumfries.

MR. BAKER BROWN AND THE OBSTETRICAL SOCIETY.

TO THE EDITOR OF THE MEDICAL PRESS AND CIRCULAR.

SIR,—I beg to congratulate you on the very independent and just manner in which you have referred to the controversy respecting Mr. B. Brown. He is a gentleman not personally known to myself, but from all I have heard of him I have gathered that he has stood high in the profession with regard to surgical skill, and that, up to the present time, no shadow has rested upon his character. It was, therefore, a matter of surprise to me when I heard of the course adopted by the Council of the Obstetrical Society, and I cannot but suppose that either some grave offence has been committed by Mr. Brown, whereby he has exposed himself to expulsion from a learned and honourable Association, or that some strange jealousy exists among the Fellows. I am necessarily ignorant of the real merits of the case, still your suggestions commend themselves to the common sense of every man. Justice demands that no one should be condemned unheard, and that the utmost publicity should be given to the investigation. This is the only way in which the Society can vindicate its proceedings. Let them show to the profession and the world that they are right in taking up the case as they have done, or let them honourably, like men and gentlemen, exonerate the accused from the suspicion they have brought upon him. Unless this is done, the profession generally will share more or less the obloquy which will unavoidably follow a negligent and partial decision.—Your obedient servant, AN OBSERVER.

TO THE EDITOR OF THE MEDICAL PRESS AND CIRCULAR.

SIR,—The question now before the Obstetrical Society is of little moment to me personally, but I hope, for the honour of the Profession, the Fellows will not adopt a course which would necessarily throw suspicion upon themselves. The real merits of the case are, of course, at present concealed from public view, but the *modus operandi* by which to arrive at a decision is, I think, open to the opinion of all. Very opposite views on this point are taken by different parties. You, sir, I perceive, advocate an open method of procedure, and consider that every facility should be given to the accused of justifying himself before the men who threaten his expulsion. This to me, who have no feeling on the subject, apart from a desire that justice should be done, seems exceedingly proper. I therefore thank you for the manly tone you have adopted in your leading columns. The *Lancet*, on the other hand, recommends closed doors when the Council meet, and that each Fellow should have made up his mind before hand from the "published matters" which have been sent him; and, of course, I argue that no defence, no explanation, no vindication of himself by the accused, however clear and convincing, should have the least weight with them; but their little rolled up slips of paper with "yes," "yes" upon them, meaning let him be sent to coventry, should be dropped into the glass globe in sight of the President, and the matter, in two hours at most, be brought to a conclusion. It is strange that such advice should come from any writer in 1867, when we reckon it our honour and our safeguard to have open courts, and trial by a jury who are compelled to hear the whole case before deciding on their verdict. One would think he had been dreaming all along of the inquisition, or some equally arbitrary conclave. As to the *Medical Times*, it seems a little frightened at the state of things just now; at all events it holds its tongue, possibly judging it wiser to keep silence until the fray is over. But the power now underlying the *British Medical*, though it has changed places, appears still as waspish and ready to sting as ever. Having closely observed the tone of the medical press, I find that yours is the only really independent organ, which, without prejudging the point at issue, advocates a straightforward and honourable course.—I am, sir, your obedient servant,

FAIR PLAY.

ON THE TREATMENT OF DELIRIUM TREMENS BY INDIAN HEMP.

TO THE EDITOR OF THE MEDICAL PRESS AND CIRCULAR.

DEAR SIR,—In your journal of 13th inst., Mr. Tyrrell, F.R.C.S.I., &c., has given notes of a case of delirium tremens treated by Indian hemp, and, as I had an opportunity of trying its effects in a case which came under my notice in February last, I can also testify to its efficacy. My patient got larger doses than those given by Mr. Tyrrell (℥ss. omni secunda hora) for the first day; and on the second day, its good effects were so manifest, that I discontinued its use. The patient had also bronchitis (the result of exposure during the commencement of the attack), but this was easily subdued, and in four days from my first visit, he was able to resume his occupation. In the concluding part of Mr. Tyrrell's communication, he says:—"That the use of Indian hemp has not been adopted in delirium tremens," and that "I do not find it mentioned in the books I have consulted." Dr. White, of Downpatrick, may have used it early in his career, but Dr. O'Shaughnessy in 1838 appears to be the first who brought Indian hemp into notice in *this* affection. Mr. Tyrrell will find, on reference to Waring's *excellent work* on *Practical Therapeutics*, all the information he may require.

Hoping, dear sir, I have not trespassed too freely on your valuable space.—I remain, yours, &c.

H. BROWNE, L.R.C.P.E., L.R.C.S.E.

Medical News.

AN Odonto-Chirurgical Society has been formed in Edinburgh upon the principles of the Odontological Society of London.

THE cattle disease is on the decline in France. The number of cases was in the middle of February 1735, and 1607 only at the end of that month.

MR. P. H. HARPER has, we understand, resigned the office of surgeon to the London Surgical Home. Mr. Baker Brown is now, therefore, the sole remaining medical officer to this institution.—*Lancet.*

MR. KERBEY, the medical officer for the Dilwyn district of the Weobley Union, Herefordshire, was recently reprimanded for "giving away too much money to the poor." He said, in reply, that he was not a relieving officer, and gave mutton only where he knew it was required instead of medicine.

DEATH OF M. BOUDIN.—The devotees to statistical and anthropological studies will much regret to hear of the death of this elaborate investigator. Occupying a high position in military medicine in France, and the author of a standard work on Medical Geography, his contributions to the various scientific and medical periodicals on every branch of medical statistics have been as numerous as valuable. We hope to be able shortly to furnish some account of his labours.

THE CHILDREN'S HOSPITAL, DEVONPORT.—We are glad to hear that Sir Charles Locock and family have undertaken the support of one bed in this hospital during the ensuing year. It must be peculiarly gratifying to the promoters of the charity to have such a practical testimony to its value from so important a member of the medical profession as Sir Charles Locock. The officers and crew of H.M.S *Lord Clyde* have sent another donation of £6 17s. 6d. to the children's ward. With so large a proportion of its little patients the children of absent sailors, such a donation is a grateful acknowledgment of the services rendered to the children of messmates. We are inclined to think that were such donations more frequent, and the Children's Hospital developed to its fullest extent, "Jack" would pay fewer visits to the cemetery and more to the cot side on his return from abroad—*Western Daily Mercury.*

FOR some time past the various towns forming "Sheerness" have been suffering from a visitation of small-pox. Great numbers of the inhabitants have been attacked by the fearful disease, and many have died. Lately the malady has appeared among the crews of the Queen's ships anchored in the harbour, and several of the seamen, marines, &c., have been attacked, Within the last two or three weeks a good many cases have been sent to Melville Hospital, Chatham, from the fleet at Sheerness. The sufferers were brought up the Medway in the *Fearless*, steam tender, to Chatham Dock yard, where they are landed, and thence conveyed to Melville Hospital. After some days had elapsed without any fresh cases being brought to Chatham, on Wednesday the arrival of a new sufferer showed that the fleet at Sheerness was not yet free from the scourge. The patient was a seaman on board the *Cumberland*, guard-ship of reserve at Sheerness.—*The Day.*

MEDICAL SOCIETY OF THE COLLEGE OF PHYSICIANS, IRELAND.—A special meeting will be held on Wednesday, 27th March, 1867. Tea at eight; chair to be taken at half-past eight P.M. Communications: Reports from the several Cholera Hospitals of Dublin. Resolution of Council, January 4th, 1867—"That on the Special Cholera night the time allowed for the reading of Abstracts from the several reports, and in the debates thereon, to each Member, be limited to Ten Minutes."

A TESTIMONIAL is on foot for presentation to Mr. Thomas Smith, who is about to resign the Demonstratorship of Anatomy at St. Bartholomew's Hospital. This is a spontaneous act, we believe, on the part of the students, and complimentary therefore in the extreme.

RATING OF SCHOOLS AND CHARITIES.—A meeting was held on Tuesday week at Willis's Rooms for the purpose of adopting measures to secure for schools and charitable institutions generally continued exemption from rating. The Earl of Shaftesbury presided, and there were present a large number of clergymen and gentlemen forming deputations from numerous metropolitan and provincial charitable institutions. Several letters of apology were read, among which was one from the retired Lord Chief Baron, stating that he rested the claim for exemption of charitable institutions and schools from rating, not on mere charity, but on justice. Resolutions were passed declaring it to be impolitic and unjust to subject these institutions to such charges, as the relief administered materially lessened parochial rates; and that the recent decision of the courts of law was contrary to the spirit of modern legislation, and tended to discourage educational effort. A deputation was also nominated to wait on the Premier.

Notices to Correspondents.

Communications to the London Editor should be addressed to 20, King William-street, Strand; to the Edinburgh Editor, at Maclachlan and Stewart's, South Bridge; and to the Dublin Editor, at 3, Lincoln-place.

All Contributions are attentively considered, and unaccepted MSS. are returned on receipt of stamps for postage; but the Editors cannot be responsible for any accidental loss, nor can MSS. or replies be delivered on personal application.

Contributions should be *legibly* written, and only on one side of the paper.

Inquirer.—We can only refer you to the advertisement in our columns for the information you seek. Mining operations are not in our way. "The Nantymwyn Company" seems to be in very respectable hands.

Dr. J. N.—Not sufficiently explicit.

Mr. Coulter.—The address shall be altered as desired.

F.R.C.S.—We believe you can recover.

Mr. L. Dalston is referred to our columns of March 13th.

TO THE EDITOR OF THE MEDICAL PRESS AND CIRCULAR.

SIR,—Will you be good enough to inform me what is the difference, if any exist, between a Member and a Licentiate of a College, as parties holding a Licence of the London College are styled the former, and of the Dublin College, the latter, also the different Colleges of Physicians.—Yours truly, INQUISITOR.

[The Membership and Licentiateship are equivalent terms, the former being given in the London College of Surgeons, and the latter in the Dublin. In the London College of Physicians, both titles are given, and that of Member holds the higher rank.—ED. M. P. & C.]

TO THE EDITOR OF THE MEDICAL PRESS AND CIRCULAR.

SIR,—As you are supposed to know everything, may I take the liberty of asking for an answer in the next number, whether, on dividing a large Dispensary district into two sub-districts, the present Medical Officer of the large district gets one of the sub-districts, that is, is he legally entitled to it without going through the form of being elected, or otherwise.—I am, sir, AN OLD SUBSCRIBER.

[Certainly. The Medical Charities Act, section xiv., provides, "That where a Medical practitioner shall be in possession of a Dispensary, &c., &c., situate in the locality included in such new district, it shall be lawful for the *Commissioners*, if they think fit, to declare him one of the Medical Officers of the new district."—ED. M. P. & C.]

MEDICAL DIARY OF THE WEEK.

WEDNESDAY, MARCH 27.

ROYAL COLLEGE OF SURGEONS OF ENGLAND.—4 P.M. Prof. Huxley, "On the Osteology and Dentition of the Sauropsida, or Reptiles and Birds."

ROYAL COLLEGE OF PHYSICIANS—5 P.M. Lumleian Lectures: Dr. Russell Reynolds, "On certain Points in the Relation between Medical and Legal Practice."

HUNTERIAN SOCIETY.—8 P.M. Mr. Gowlland, "On Cases of Fistula in Ano requiring different Methods of Treatment."

SOCIETY FOR THE ENCOURAGEMENT OF ARTS, MANUFACTURES, AND COMMERCE.—8 P.M.

THURSDAY, MARCH 28.

ROYAL INSTITUTION—3 P.M. Mr. Pengelly: "Geological Evidences of Antiquity of Man in Devonshire."

FRIDAY, MARCH 29.

ROYAL COLLEGE OF SURGEONS OF ENGLAND—4 P.M. Prof. Huxley, "On the Osteology and Dentition of the Sauropsida, or Reptiles and Birds."

ROYAL COLLEGE OF PHYSICIANS.—5 P.M. Dr. Burdon-Sanderson, "On the Mode and Duration of the Contraction of the Heart in Health and Disease."

ROYAL INSTITUTION—8 P.M. Prof. Frankland, "On the Water-Supply of the Metropolis."

SATURDAY, MARCH 30.

ROYAL INSTITUTION—3 P.M. Mr. Pengelly: "Geological Evidences of Antiquity of Man in Devonshire."

MEDICAL APPOINTMENTS.

ARNISON, C., L.R.C.P.Ed., M.R.C.S.E., has been appointed Medical Officer and Public Vaccinator for the Stanhope and Newlandside Districts and the Workhouse of the Weardale Union, vice G. Arnison, L.R.C.P. & S.Ed., deceased.

ARNOLD, R. O., L.F.P. & S.Glas., L.M., has been appointed Medical Officer and Public Vaccinator for the 4th District of the Chesterton Union, Cambridgeshire, vice Dr. B. Pinchard, non-resident.

JACOB, ARCHIBALD H., M.D., T.C.D., F.R.C.S.I., has been elected a Member of the Council of the Royal College of Surgeons in Ireland.

BALL, J. A., M.B., has been appointed House-Surgeon to the Stockport Infirmary, vice W. J. Wane, M.R.C.S.E., resigned.

BERRELL, C., M.R.C.S.E., has been appointed Resident Medical Officer to the St. Pancras and Northern Dispensary, vice T. C. Shaw, M.D., resigned.

BLUNDELL, W., M.R.C.S.E., has been appointed Surgeon to the Chelsea Brompton, and Belgrave Dispensary, Sloane-square, vice T. Dickinson, M.R.C.S.E., resigned.

SMALLMAN, R. S., M.B., has been appointed Assistant Medical Officer to the Durham County Lunatic Asylum at Sedgefield, vice J. A. Campbell, M.D., appointed Assistant Medical Officer to the Cumberland and Westmoreland Asylum, Garlands, near Carlisle.

THOMAS, O. D., M.R.C.S.E., has been appointed Assistant-Surgeon to the 5th Monmouthshire Rifle Volunteer Corps.

WALKER, A., M.R.C.S.E., has been appointed House-Surgeon to the London Hospital, vice R. Ley, M.R.C.S.E., whose appointment has expired.

Births, Marriages, and Deaths.

Announcements are inserted without charge, and must in all cases be authenticated with the signature of the sender.

BIRTHS.

BLAIR.—On the 2nd inst., at Denholm, Roxburghshire, the wife of W. Blair, M.D., of a son.

BARBER.—On the 7th inst., at Ulverstone, the wife of H. Barber, M.D., of a daughter.

M'CARTHY.—On the 8th inst., at Mountjoy-street, Dublin, the wife of Edward M'Carthy, M.R.C.S.E., Staff Assist.-Surgeon Army of a son.

GILBERT.—On the 10th inst., the wife of H. Gilbert, M.R.C.S.E., of Princes-end, Tipton, Staffordshire, of a daughter.

THOMAS.—On the 11th inst., at St. Clears, near Carmarthen, the wife of J. Little Thomas, Surgeon, of a daughter.

SPENCE.—On the 13th inst., at Linlithgow, N.B., the wife of Robert Spence, M.D., of a daughter.

MARRIAGES.

HILL—KING.—On the 5th December, at Sandridge, Victoria, John James Hill, L.R.C.P.Ed., L.F.P. & S.Glas., late of Royton, Lancashire, to Jane, daughter of the late John King, Esq., of Huckforth, Yorkshire.

ADLEY—ROSS.—On the 19th of January, at Barrackpore, W. H. Adley, Surgeon 17th Bengal Cavalry, to Evelina Ross, daughter of Major-General George Burney, Bengal Service.

DEATHS.

LANSDOWN.—On the 27th of December, at Brisbane, Australia, aged nine weeks, Reginald Chas. Joseph, the infant son, and on the 2nd of January, Lucy, the wife of Dr. J. Ruscombe Lansdown, and daughter of the late Rev. Charles Emerson, of Llanfair, Cardiff.

GILCHRIST.—On the 12th ult., W. Gilchrist, M.D., of Lake House, Torquay, Devon.

LITTLE.—On the 16th ult., at Weolwich-common, J. S. Little, M.R.C.S.E., Surgeon-Major Royal Artillery.

WALKER.—On the 27th ult., R. Walker, M.D., of South Apsley-place, Glasgow.

WALTERS.—On the 2nd inst., E. S. Walters, M.R.C.S.E., of Leek, Staffordshire, aged 53.

SWIM.—On the 8th inst., D. E. Swim, M.D., of Earlstown, Warrington Junction, Lancashire.

FARR.—On the 13th inst., at Dunstable, Joseph Farr, Esq., aged 75. Mr. Farr commenced practice prior to 1815.

COLSTON.—On the 17th inst., at Husbands Bosworth, Leicestershire, Peter Colston, Esq., aged 57, for many years District Medical Officer of the Market Harborough Union.

Original Communications.

DESCRIPTION OF A STRICTURE DILATOR ON THE DOVE-TAIL PRINCIPLE.

By B. WILLS RICHARDSON, F.R.C.S.I.,
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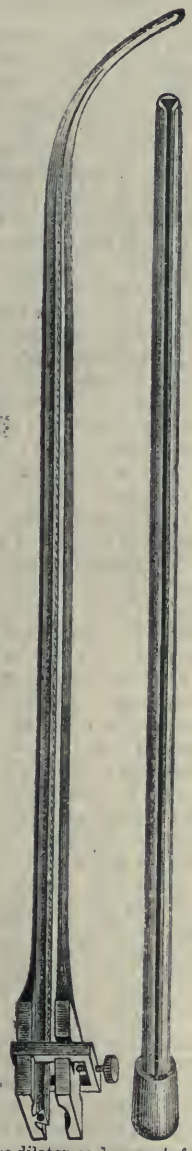
DURING a visit to Mr. William Oldham's *studio*, while he was occupied in engraving the illustrations for my communications regarding Perrève's dilator, he causually informed me it was his opinion that the blades of the dilator might be made to divaricate much more simply, while, at the same time, with equal security as they do by the mechanism employed in the welded instruments of Perrève, and that the dilator might be modelled of as small a calibre as in those instruments. He also stated that greater solidity might be obtained if the conductor were welded *its whole length* to the lower blade, instead of by one end only. A most important advantage while the instrument is being passed into the bladder, as well as when the forcer is being pushed home.

Fig. 1.



Mr. Oldham's modified Perrève stricture dilator and separate forcer, on the dove-tail principle.
W. Oldham, Sep.

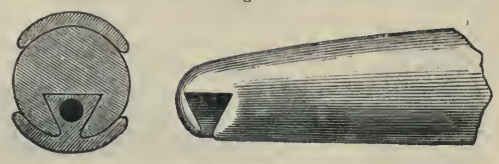
To prevent any misapprehension I shall here observe that I include under the name of Perrève, all dilators constructed upon his principle, having the conducting rod attached and fixed only at their vesical extremities.

Mr. Oldham's idea was, that the conductor should be formed like the male part of a dove-tail, and attached by its apex along the whole length of the middle of the upper surface of the lower blade; and that the forcer should be hollowed to correspond, having a slit in its under part, for the passage, or free sliding, of the narrow neck of the conductor.

An instrument constructed as Mr. Oldham suggested appeared to me to possess such solidity, and to be so well calculated to meet the objections of those timid surgeons who mistrust the movable conducting-rod of the Perrève dilator, that I requested Mr. Oldham to make an engraving of an instrument having a conductor of the dove-tail form.

Fig. 1 represents the modified dilator suggested by Mr. Oldham. It will be perceived that the grooved blades and one of the clamps of Perrève's dilator are retained, but that the conductor is triangular and attached by its apex along the middle of the upper concave surface of the lower blade. The conductor is pierced by a canal for the passage of the urine. The vesical opening of this canal may be placed either in the convexity of the curve of the dilator, or at the beak, for Desault's button-ended wire guide, if required.

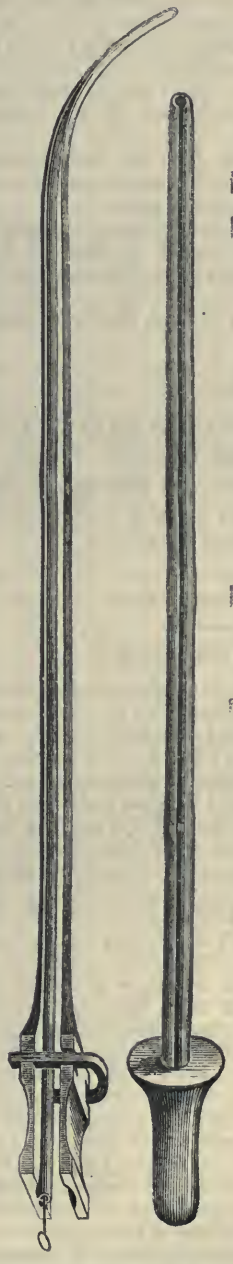
Fig. 2.



Enlarged vertical section of the component parts of the dove-tail dilator, with a separate piece of the forcer, to show the situation the passage for the conductor should occupy.
W. Oldham, Sep.

Fig. 2 are enlarged representations of a vertical section of the component parts of the dilator, and a separate piece of the vesical end of the forcer, to show the exact situation of the passage for the conductor, and which it should maintain throughout.

Fig 3.



Mr. Richardson's modification of the dove-tail dilator, with separate forcer.
W. Oldha m, Sep.

If properly constructed and made of a well tempered material, it is not possible to conceive that an accident as regards disarrangement of the component parts of this dilator could happen during its use. The male and female parts of the dove-tail being so proportioned as merely to allow of easy sliding of the forcer along the conductor, the former must be maintained on the latter while the instrument is in action.

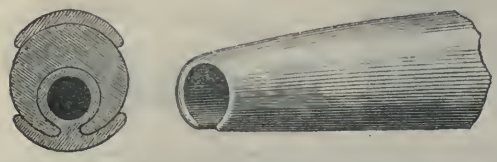
Since Mr. Oldham engraved Figs. 1 and 2, he has, at my suggestion, made some alterations in the instrument which appear to me calculated to facilitate its working.

They are seen in Fig. 3. The conductor I have had rounded, and attached through the intervention of a very narrow and shallow bar along the centre of the upper surface of the lower blade, as in Fig. 1. The conductor of this instrument may also be hollowed for the passage of the urine. The half handles are longer than those of Fig. 1. and are grooved transversely, above and below, for secure grasping.

The handle of the forcer has a shoulder to prevent the slipping of the finger and thumb when we are forcing it home.

One of Perrève's clamps has been likewise retained in my modification, to secure the proper relation of the blades when being divaricated.

Fig 4.



Enlarged vertical section of the rounded dove-tail dilator, with a small portion of the forcer to show the situation the passage for the conductor should occupy.
W. Oldham, Sep.

Fig 4 represents an enlarged vertical section of the component parts of the rounded dove-tail dilator, and a separate piece of the vesical end of the forcer to show the exact situation of the passage for the conductor and which *it*, also, must maintain throughout.

In the above description I have spoken of the *welding* of the conductor to the lower blade. These portions of the instrument, however, can be formed otherwise ; for, a well educated surgical instrument mechanic ought to be able to construct conductor and lower blade out of one piece of metal without any welding whatever, in the situation alluded to.

In conclusion I may observe that the handle can be shaped according to the fancy of the surgeon, and covered with ivory, if preferred to roughened steel.

I need scarcely say, that the internal corresponding surfaces of each half-handle should be grooved longitudinally, and that these grooves are to be continuous with the grooves of the blades.

Two different sized forcers, *at least*, should be supplied with the dilator.

NOTES ON A CASE OF PHAGEDÆNIC CHANCRE OCCURRING ON THE DORSUM PENIS,

ACCOMPANIED BY BUBO OF THE RIGHT SIDE, AND FOLLOWED BY CONJUNCTIVITIS, PASSING RAPIDLY INTO SCLEROTITIS AND ACUTE KERATITIS OF THE RIGHT EYE.

READ BEFORE THE ULSTER MEDICAL SOCIETY.

By ANGUS M. PORTER, M.D.

On the 16th of last December, A. C. M., a married mechanic, was brought to me for a sloughing sore on the dorsum of his penis, which he first noticed as a small abrasion a fortnight before. On examining, I found it to be about the size of a florin, the surface an ashy grey, discharging a greenish ichor; the edges ragged and high, and the base flabby, nonindurated. The cellular tissue of the prepuce was infiltrated to a great extent, but the dorsal lymphatics did not appear in the least implicated, nor had he at this time any sign of bubo in either groin. On questioning him as to his habits and health he told me he occasionally drank freely, was exposed to heats and colds, had a variable appetite, and was not accustomed to very good food. The bowels were regular. He was not aware of suffering from any complaint but the one for which he wished me to treat him, and was not aware of ever having had venereal disease before. He was in a painfully nervous state, and this he attributed to loss of sleep. He had been poulticing the sore on his own responsibility for several days, and had also drugged himself with senna and salts; his pulse was quick and thready, his tongue creamy, and his complexion sallow.

With the assistance of his companion, I put him slightly under the influence of chloroform, and freely cauterized the chancre with strong nitric acid; applied a piece of lint dipped in a mixture of glycerine and water, over this oiled silk, and a small, light bandage, in which I included the swollen foreskin; ordered him to keep a poultice of linseed meal to the sore during the night, and renew it next day; to support the yard on his abdomen by means of handkerchiefs; and get to bed as soon as practicable. I gave him twenty grains of Dover's powder to be taken at eight o'clock, and prescribed five-grain doses of Plummer's pill, night and morning. On his leaving he appeared much more tranquil, the pain of the operation having almost passed away.

On Tuesday, the 18th ultimo, according to arrangement, he called with me; had of necessity been at his work the preceding day, but had not suffered much pain; had slept well during the night, and did not appear in the least agitated or nervous; his bowels had been freely opened in the morning; the ulcer was now deeper than the skin, and discharging thin yellow pus; the edges were high and the margin inflamed. Into the centre of the ulcer I dropped a little of the red oxyde of mercury, and having smeared the intact skin with a mixture of collodion and glycerine, applied a weak lotion of nitric acid, and bandaged up the penis against his abdomen. Prescribed the compound decoction of sarsaparilla, in one ounce doses, three times daily. Before he left, I found on enquiry a large bubo had appeared in his right groin—the side corresponding to the larger half of the chancre on the dorsum penis. I recommended a poultice of linseed meal to be kept to it, and the weak nitric acid lotion to be renewed to the chancre when required.

On Thursday, the 20th ultimo, the ulcer presented a red granulating surface, with healthy pus ; the edges were less inflamed, and level with the sound skin. Ordered frequent applications of black-wash ; the bubo was large and painful ; I opened it, and obtained a good quantity of curdy matter, very dark coloured ; he experienced great relief from this ; I then painted the skin over and about with tincture of iodine ; I stopped giving him the compound calomel pill, as he had now taken in all half a drachm of it, leaving him on the compound decoction of sarsaparilla as his only medicine.

Christmas day, the 25th ultimo, the ulcer was healing rapidly ; his general health was good ; he had been living more generously for the previous four or five days, and taking his food with relish ; had slept well, and did not appear to suffer from febrile excitement.

On the 27th ultimo the new skin had begun to form from the edges, the bowels kept regular, and the appetite and spirits good ; I painted the bubo with tincture of iodine ; it had almost disappeared, as had the swelling of the prepuce.

On the 28th ultimo the ulcer was nearly healed, there being but the size of a groat of granular surface.

On the 29th ultimo the ulcer was covered with new skin, except a very minute patch ; no traces of the bubo remained, save a little hardness. On this date he discontinued the compound decoction of sarsaparilla as recommended. He now left me, thinking he was cured.

On the fourth day of this month (January), he came back to me complaining of a sore throat ; he thought he had caught cold, and evidently had. On examining his throat I found the uvula full and congested, with a similar condition of the right tonsil, and diffuse erythema of the fauces, but could not detect ulceration of any kind. He was feverish and nervous, and seemed to apprehend something unpleasant. Recommended frequent alum water gargles, and gave him a powder composed of two grains of calomel with twenty grains of Dover's powder, to be followed in the morning by a dose of salts ; his bowels had not been acting for two days, and this condition seemed to aggravate his symptoms. Before leaving, he directed my notice to the smarting of his eyes, and congestion of the conjunctivæ, which, however, was very slight.

On the 5th inst. the chancre was quite healed ; the throat was slightly better, but the conjunctiva of the right eye was greatly inflamed, that of the left eye less so ; I touched the palpebral portions of the membrane with the stick nitrate of silver ; gave twenty grains of Dover's powder; ordered two leeches to the temple, and dreading the possibility of syphilitic poison having something to do with this acute attack, immediately put him on the bichloride of mercury, prescribed in the following form :—

℞ Hyd. bichlor. gr. ii.
Tr. hyoscyam. ʒii.
Vin. colchici.
Vin. ipecac. aa. ʒss.
Infus. gent. co. ad ʒiv. M. ft. mist.

A teaspoonful to be taken in a glass of water three times daily as directed; recommended as nourishing food as his means would permit of, warm clothing, and, as far as possible, avoidance of exposure. He had to leave off work on this date, owing to the intense pain; his nervousness was excessive, and the application of the caustic seemed to excite him very much.

On the 7th inst., he came to me in great alarm, saying his eye was much worse; he was suffering extreme pain in the brow and temple, which at times he referred to the deeper structures of the ball; he had most marked photophobia of the right eye; the tears ran from both on examination, but principally from the right one, the left conjunctival membrane seemed much improved, and the congestion greatly lessened, but on the right side the inflammation had extended, and the subjacent tunic become involved, as indicated by the straight pink coloured vessels to the inner side of the cornea, which were visible for a limited extent, running from the margin of the blueish white ring, and terminating in the capillary net work of the conjunctiva; the pupil was at this time dilated. The soreness of the throat had passed away; his bowels were regular, but his appearance was haggard and worn from want of sleep. Ordered two leeches to his temple, and twenty grains of Dover's powder to be taken at bed time; the bichloride of mercury mixture he was taking regularly.

On the 8th inst. the inflammatory action of the left eye had disappeared, while in the right eye it had decreased in the conjunctiva, but increased and extended in the sclerotic to the inner side of the cornea, round which the blueish white ring had become more opaque; the cornea itself was still clear, with the pupil contracted. He had great dimness of vision; intolerance of light, and profuse flow of tears, supra-orbital pain, and severe headache, accompanied by a good deal of febrile excitement. Recommended a full dose of Dover's powder, and hot fomentations to the eye, the other treatment being strictly pursued.

The following day (9th inst.) he returned in a state of destraction, more, however, from the dread of evil results than any pain he suffered. On raising the lid I found the whole cornea had become opaque, completely obscuring the pupil, he could not see at all with this eye. The pink coloured vessels of the sclerotic were very distinct to the inner side, while very little congestion remained in the capillaries of the conjunctiva. Prescribed ten drops of the tincture of perchloride of iron every hour, the bichloride of mercury being continued as before, and as a collyrium :—

Ext. Belladon. gr. xx.
Zinci Sulph. gr. xl.
Aquae distill. ʒiv. M.

The full of a small syringe to be injected under the lids four times daily, while with me I used some of this to his eye, and though painful at the time, he experienced great relief after it, accompanied by intense itching. Recommended a blister behind his right ear, and gave him a Dover's powder to take at bed time.

I did not see him on the 10th inst., but visited him at his own house on the 11th; his friends had refused to give him his medicines, or otherwise carry out my instructions. I then found it necessary to tell his wife the previous history of his case, in order that she might afterwards permit him to go by my advice. On exposing the eye, considerable congestion of the conjunctival capillaries, more diffuse and extensive inflammation of the sclerotic membrane on all sides, less opacity of the cornea, and a more dilated pupil, were the appearances observed; though the pupil was now apparent he could not in the least degree distinguish light from shade. The treatment was now resumed, and the blister applied.

On the 12th inst. I learned that all directions had been strictly attended to, the changes presented by the eye were more general redness of the conjunctiva, and deeper colour in the radiating capillaries of the sclerotic, the condition of the cornea remaining unaltered; his pulse was sixty in the minute, steady and full; his tongue clean; appetite good; and nervous excitement much less; his throat he did not now complain of, nor did it present an unhealthy state; on this occasion some extract of Belladonna was smeared round the orbit of his affected eye.

The 13th inst., the conjunctival congestion was less, and confined to the inner side of the membrane, there was less opacity of the cornea, and greatly diminished vascularity of the sclerotic; the pupil was more dilated; the tongue was clean; pulse 65, regular; his throat was rather inflamed-looking; he appeared in excellent spirits; had a good appetite, and was now, as recommended, taking two bottles of porter in the day; ordered a cathartic pill to relieve constipation.

On the 14th inst. the inflammatory action of the membranes was rapidly decreasing, the sclerotic vascularity remained round the margin of the cornea, but the colour of the vessels was much lighter; the cornea itself had begun to regain its transparency, the pupil was large, his general health and spirits kept good, his bowels had been freely moved, and his throat seemed better: he now stated he could discern light and shade with the diseased eye.

On the 16th inst. the improvement in the eye was marvellous: the cornea was almost quite clear again, the pupil was widely dilated, the redness of the conjunctiva was very slight and confined to the neighbourhood of the inner canthus; the radiating vessels of the sclerotic were still visible, but less distinct; his health and spirits continued excellent, he had a keen appetite, his tongue was clean, and his throat much better.

On the 17th inst. the improvement developed in the eye within the space of twenty-four hours was such that he could again distinguish objects; the opacity of the cornea had become absorbed, and it had almost returned to its normal state; a lingering inflammatory blush still remained in the sclerotic; the neighbourhood of the inner canthus seemed to have a little more redness than on the preceding day, but it appeared he had gone out into the cold air, and this may have accounted for the latter symptom.

On the 18th inst. he could see quite as well with his right eye as with the unaffected one, but the weakness which still remained prevented his looking at any object for more than a minute at a time. The sclerotic vessels still imparted a pink hue to the white of the eye; all conjunctival redness was gone. The blueish-white ring which encircled the cornea had greatly diminished. The bichloride of mercury was finished.

On the 19th inst. the cornea was quite transparent, but considerable vascularity remained in the sclerotic. His health kept good, and he had commenced to take cod liver oil. Did not renew the corrosive sublimate, of which he had taken, in all, two grains.

On the 21st inst. the eye was much stronger, and the sclerotic vascularity greatly lessened; the bowels had been freely moved. The cod liver oil seemed to agree with his stomach. The right tonsil was inflamed, and caused him some uneasiness in swallowing.

He was at his work the following day; he felt his eye getting stronger, and his throat better; he had applied a mustard and linseed poultice externally to it during the night, and received great relief from it.

On the 25th inst. every trace of inflammatory action had left, and the eye presented a normal appearance. He could now see almost as well as ever he had done. His throat being still a little troublesome, was cauterized with a strong solution of nitrate of silver. He kept in excellent health, and found the cod liver oil agreed well with him, as did the tincture of perchloride of iron, of which he was now taking fifteen drops three times daily.

The next day his throat, though better, was again cauterized. His eye was being strengthened by douches of cold water applied night and morning.

On the 28th inst. his throat was cauterized, and appeared greatly improved. He did not find any injurious effects from being at his work.

On the 30th instant his throat was much improved, and he could swallow without pain. I recommended him a mixture of chlorate of potass and tr. of steel, with infus. of quassia. I now considered him free from the malady for which he originally came to me, and discontinued my visits, believing the throat affection to be due merely to simple congestion of the mucous tract.

In reviewing the history of the case, some peculiarities may be observed, while the treatment adopted is perhaps deserving of a little consideration.

Mr. Henry Lee has described four varieties of chancre—viz., the Hunterian or true, the non-indurated or soft, the phagedænic, and the gangrenous or sloughing chancre; the third is most like the form presented in the foregoing report, but yet materially different. Mr. Lee in speaking of it says—"It produces suppuration, generally of one inguinal gland only, which yields an inoculable secretion. It is not followed by constitutional syphilis, and may be treated by local means."

In this patient it has been seen that one inguinal gland only suppurated, but that constitutional symptoms ensued, and these—neither preceded nor accompanied by any eruption of the skin—were confined to the right side of the body, and supervened on the healing of the primary sore; that there was no induration, and the chancre exhibited the process of ulcerative inflammation *(vide* "A System of Surgery," edited by T. Holmes, M.A., &c., vol. i., p. 461). It was seen that the right tonsil and uvula were congested and swollen, while no ulcers could be detected on any portion of the mucous membrane of the mouth or throat. These facts, together with the nature and course of the diseases which attacked the eye, do, I think, give an uncommon aspect to the whole case.

As noticed, the treatment pursued was successful, and throughout unattended by ptyalism, or other indications of mercurialization, which were carefully watched for, in order that the use of mercury might be suspended or stopped should such arise. From the first, the strength was supported by a nourishing diet, and the irritation allayed by full doses of Dover's powder. A small amount of Plummer's pill was administered at the early stage, but merely with the object of acting on the skin, liver, and bowels, not as a prophylactic. The cauterization with strong nitric acid, and the subsequent local applications, having been attended by good results, and unaccompanied by any considerable amount of inflammation or constitutional disturbance, give sufficient evidence in their own favour. When the eye affections became apparent and the mercurial treatment was indicated, a mixture containing corrosive sublimate, in combination with henbane, colchicum, and ipecacuanha, as already observed, was adopted, the blood being at the same time strengthened by tincture of steel, in large and frequent doses, and this supplemented by cod-liver oil. The speedy resolution of the inflamed membranes, and the improvement which took place in the general health, may be spoken of as consequent on the treatment to which the system was subjected.

CASE OF FEBRIS NIGRA—"BLACK DEATH."

By JOHN RIDLEY, M.D., F.R.C.S.I., &c.

On the morning of the 21st March I was called on to visit G. B., aged 17 years, an apprentice in a large grocery establishment. He had been in good health up to nine o'clock on previous evening, when he complained of rigors and headache. Supposing it was an ordinary cold, his feet were bathed in hot water, and he got a hot drink going to bed. At seven o'clock next morning a person going into his room observed him to be very pale and weak-looking, and he could not for some time speak, but after a little time he was able to say that he felt as if he was "smothering" in the night, but felt so weak he could not call any one. On my seeing him at eight o'clock, he was still very pale; pulse 120, very feeble and indistinct; the sounds of the heart were quick, and striking the side with force; no bruit; respiration a little hurried—22 in the minute; no mucous or other rales; surface of the body cold; conjunctivæ congested; is perfectly conscious; says he has no headache now; has not vomited or been purged; presents the appearance of one who has received a shock.

Ether Chloric,
Spt. ammoniæ aromat., aa. gutt. 20.

to be given alternately with an ounce of wine every hour; heat to be applied to extremities.

Eleven o'clock.—Small dark spots have appeared over the face, the size of grains of shot; also on the feet and legs; pulse more feeble; heart's action weaker, and has lost its forcible beat; heat of body improved; tongue furred and swollen.

Wine to be increased to 2 oz.
Ether and ammonia drops to 30.
Beef-tea for drink.

Two o'clock.—Since last visit the black spots on the face have become larger—now appearing to be the size of a sixpence each. The nose and lips tumefied and livid. The spots on legs have also become larger, and those on the toes have extended to the soles of the feet; pulse very indistinct, and not to be counted; heart's action scarcely audible; no urine secreted since the attack; bowels acted once largely, discharge of the ordinary yellow character.

Four oz. wine, and ½ oz. brandy alternately every hour.
Acid hydrochloric,
Tinct. perchlor. ferri aa. gutt. 20,
Secunda hora emp. ves. cordis regione.

Half-past six o'clock.—Face now presents the appearance of a livid mask; great jactitation; pulse same as last report; breathing more hurried; eyes much congested; nose and lips more tumefied and livid; is perfectly conscious; asks questions relative to his family; spots on legs and thighs have now become large patches; urine still suppressed; a few scattered spots only on the body; bowels have acted again.

Enema amyli c. tinct. opii to be given, and repeated if purging goes on.
Wine and brandy to be continued.

March 22nd, half-past two o'clock, a.m.—Had some vomiting for the first time, followed by a convulsive movement of his head and arms, when effusion of mucus into bronchi took place and he died—in twenty-nine and a-half hours after first illness—and being conscious up to an hour before death.

The body after death presented the following appearance: Face and head much swollen, particularly the nose and lips, and covered with a large black patch, which extended from the malar bones to the chin, and across the face; dark patches down the front of the neck, also down the arms, which are of a dusky hue; hands livid and spasmodically contracted. A few scattered spots on the body, the thighs and legs covered with large black patches, the toes perfectly black, and the black appearance extends down the soles of the feet to the heels.

This case, in the treatment of which I was assisted by Dr. Moorhead, closely resembles those reported by Dr. Lyons in The Medical Press and Circular for May 16th and June 13th of last year, and well described by him as "examples of extreme typhic prostration, with the associated condition of rapidly developed purpura hæmorrhagica affecting the cutaneous system of capillaries."

It is to this affection the name of "black death" has been given, from its supposed similarity to the black death of the sixteenth century. Whether it is the same disease revived or not, it is no misnomer to call it so, from the rapidity of its course, the repulsive form it presents, and the eminently fatal character it assumes almost from the first symptom.

There are but five other cases, as far as I know, reported as having occurred in this country, four by Dr. Lyons, and one by Dr. Little, others are said to have occurred since, reports of which should be given, that the profession may have the fullest information of the history and progress of this most fatal disease.

THE TREATMENT OF EPILEPSY: PRINCIPLES AND PRACTICE.*

By JOHN CHAPMAN, M.D., M.R.C.P., &c.

(Continued from page 290.)

AFTER watching Dr. Radcliffe's theoretical summersaults, during the dizzy whirl of which he saw, for the first time, the nervous and muscular systems in a functional relation to each other precisely inverse to that which they are usually supposed to sustain, I rejoice in being able to observe him walking once more on the firm ground of practice, arm-in-arm with Dr. Brown Séquard; for now, the theory of epilepsy propounded by that eminent physician, the teachings of Dr. Radcliffe's experience, and my own neuro-pathological and neuro-therapeutical discoveries all concur in pointing out that the scientific treatment of epilepsy must be sought in methods of exercising a sedative influence on the nervous centres presumed to be specially indicated in each case. All that we know of the physiological effects of bromide of potassium is in harmony with our experience of its efficacy in treatment of convulsive affections. I believe I shall not be contradicted when I say that of all known drugs this has been proved to be the most successful in the treatment of the disease in question (of course I am here speaking of epilepsy of the kind often called idiopathic, or, in other words, of that form of the disease which is not associated with any removable eccentric cause). There are, however, certain objections to the use of bromide of potassium. *First*, its influence on the nervous system is of a degenerative kind: it lessens both the sensibility and the excito-moto power, and its influence on the brain being of essentially the same nature as that which it exerts on the spinal cord, its continued use in large doses, and, in some cases, doses adequate to restrain the epileptic attacks, may seriously impair both the intellectual and emotional nature. Though I have never seen the grave results of its copious administration described by M. Huette—viz., delirium, resembling the incoherence of idiotcy, mingled with hallucinations, I have, in two cases, seen impairment of the cerebral functions to the extent best denoted by the word stupidity, brought on by the protracted use of this drug in doses not considered large. The *second* objection to bromide of potassium is not a special one, for it may be urged against internal medicines generally—viz., that it operates on the whole system at once, and thus, so far as the nervous system is concerned, while exercising a sedative influence on those particular nervous centres, which, in any given case of epilepsy, are in a state of undue excitability, and is thus acting beneficially, it also exerts a like sedative influence upon the healthy parts of the nervous system, and lessens the nourishment of the brain. In cases where there is a tendency to cerebral congestion, the latter result will not be injurious; but in the majority of cases of epilepsy there is no such tendency, except during, and immediately after, the fits. I apprehend that bromide of potassium fails most signally as a remedy for epilepsy in those cases in which the tendency to cerebral anæmia is most marked. The *third* and most decisive objection to this drug, when mainly relied upon, is that, though it often lessens the number of fits, and sometimes prevents their recurrence, it generally fails to cure the disease. I believe I am correct in stating that every one of the cases which I have treated successfully by means of the spinal ice-bag, had been previously treated unsuccessfully by means of bromide of potassium.

Believing, as I do, that the proximate cause of epilepsy is seated in some part of the automatic nervous centres comprising the sympathetic ganglia, and what Dr. Marshall Hall calls the "true spinal cord," and that it consists in a state of excessive irritability or excitability of the parts, morbidly affected, associated with hyperæmia of those parts, I am of opinion that the therapeutical desideratum is one which may enable us to exert a sedative influence on those nervous centres morbidly affected, and on them alone. Now, in my opinion, this desideratum is supplied by the spinal ice-bag more completely than by any other means at present available for the treatment of the disease. This bag, which is made of various sizes, in order to be adapted to different patients, consists of several cells, so constructed as to allow of the application of the ice to the whole, or to special segments of the spine, accordingly as the physician may desire.* When using it for the treatment of the disease in question, my method of applying it differs in different cases, and is determined by what I conceive to be the special requirements of each case, and, particularly, by the opinion which I may have formed as to the segments of the spinal cord and sympathetic ganglia, in which the proximate cause of the disease is chiefly seated.

Although I have distinctly asserted that the spinal and sympathetic nervous centres may be directly and powerfully influenced by modifying the temperature of the spinal region, it is probable that those physicians, who now for the first time hear of my method of treating convulsive affections will receive with incredulity my announcement that the nervous centres in question can be influenced by heat or cold—of such temperatures as are practically available—applied along the back, and that those affections may be treated most successfully by that method. Indeed, experiments have been made, the results of which have been alleged to be fatal to both my doctrines and practice. For example, Dr. Hughlings Jackson applied ice to the upper part of the spine, and then, while the ice was thus applied, observed the retinal arteries with the ophthalmiscope, and being unable to discern any enlargement of them, concluded that they, as well as the cerebral circulation, were in no degree influenced by the ice. Again, Dr. William Ogle has informed me that he has applied a hot poultice to the spine, and failed to observe any appreciable fall of temperature in the hands of the person thus experimented on. Now, I have a few remarks to make on these experiments, and the conclusions drawn from them. First, in healthy persons—and I understand these experiments were made on such persons—the arteries in all parts of the body are of normal diameter, and therefore the extent to which they may be dilated beyond their normal volume is comparatively small, and whatever increase or decrease of their diameters may be effected by modifying the temperature of the spinal region will, in many cases, be difficult of detection. If, on the other hand, arteries already much contracted be operated upon through the agency of the nervous system, the result will become strikingly apparent. But even in this case the experiment must be continued, not during an hour merely, but for a certain number of hours, during days, and perhaps weeks, though patients differ extremely in respect to the time required by their chronically contracted arteries to attain their normal volume. It appears to me that it might be expected, *a priori*, that when arteries have long been in a condition of tonic spasm, and indeed of partial atrophy, and when the starving structures which they supply have so far lost their vitality as to be no longer able, by virtue of the powerful elective affinity of their elements, to make those copious draughts on the

* A Paper read at the Medical Society of London, March 18th, 1867.

* The spinal ice-bags are made of the following lengths:—8, 10, 12, 14, 16, 18, 20, 22, 24, and 26 inches. They vary in breadth from two to four inches and a quarter, the shortest bag being the narrowest, and the longest the broadest. The smallest sizes, or those 8, 10, and 12 inches long, are, in respect both to length and breadth, suitable for children; those 14, 16, and 18 inches long, for youths of both sexes; those 20 and 22 inches long, for women; and those 24 and 26 inches long, for men. Of course there are cases in which a tall woman may need a bag 24 inches long; while one 22 inches long will be suitable for a very short man. The bags may be procured in London from C. Mackintosh and Co., the manufacturers, 83, Cannon-street, E.C.; S. Maw and Son, 11, Aldersgate-street, E.C.; John G. Gould, 198, Oxford-street, W.; and in Glasgow from Thomas Chapman, 56, Buchanan-street; also, by order, from all druggists.

blood passing through those arteries, which in health they were wont to do, a considerable time must elapse, even after all extra normal stimulus to these vessels from the nervous system has been cut off, before they can regain their full healthy calibre, and before the structures to which they are distributed can again acquire adequate nourishment. And, as just said, experience confirms this expectation.

In the introduction to my work "On Cholera" I have given evidence that the activity of every gland, and gland follicle in the body, is produced by stimulus transmitted to it from the cerebro-spinal system; and that the function of the sympathetic, in so far as glands are concerned, is the same as that which it performs in relation to all other structures—viz., that of presiding over the action of the arteries supplying them. Each gland is thus subject to two opposing forces, one transmitted through a cebro-spinal nerve, causing the gland to function and to draw blood to itself through its appropriate artery, the other transmitted through a sympathetic nerve, and causing the artery on which it is ramified to contract with a degree of energy proportinate to the amount of stimulus which it receives. I have also adduced reasons for believing that this two-fold relation of the nervous system obtains with respect not only to glands, but to every other part of the body, so that we may say of the bodily structures generally, "that, in addition to the sensory nerve supplied to each, there are two motors: one exercising on the cellular constituents of the structure a stimulant influence, causing it to attract blood to itself; the other by stimulating the muscular coat of the arteries, causing them to contract, and thus to regulate, restrain, or even to arrest the blood-supply." If this doctrine be true, it is obvious that the effects of cold or heat applied along the spine will only become most strikingly apparent in cases of disease, or in other words, when there is any considerable perturbation of the action of the forces in question, the one dominating over the other to an abnormal degree. This consideration affords, as it appears to me, an important additional explanation why it is that the effects on the peripheral circulation of cold or heat applied along the spine of healthy persons, are less perceptible than those inducible in cases of disease. Moreover, in as much as it is fairly presumable that, in different individuals the relative strength of the cerebro-spinal and sympathetic nervous systems is aboriginally different, this same consideration explains why it is that in different individuals widely different effects are produced by modifying the temperature of the spinal region.

Without further discussion of physiological or theoretical views I will now cite some positive evidence that the therapeutical method in question is peculiarly adapted for the successful treatment of convulsive affections. I need scarcely point out how desirable it is to obtain a power of influencing the cerebral circulation, and it will, I presume, be admitted, that if evidence can be tendered that any branch of the internal carotid artery can be influenced in the manner I advocate, the conclusion is inevitable that the cerebral circulation generally can be thus influenced. In the Introduction to my work on "Diarrhœa and Cholera" I said: "My own success in improving vision by spinal applications has been not less striking than novel; and Mr. Ernest Hart, complying with my request to make trial of the method I had originated, has already published a report of his successful treatment of a case of that hitherto incurable form of blindness, cerebral amaurosis, and has informed me of two other cases of grave impairment of sight, in which, by the use of spine-bags, he has conferred signal benefit. In the case of amaurosis, consisting of spasmodic contraction of the retinal arteries, they became dilated by means of ice—the retina losing its pale anæmic colour and resuming the pinky hue of health, the vision was correspondingly improved, and, simultaneously, the epileptic attacks, from which the patient had long suffered about three times a-week, were so subdued that they occurred only twice during the whole five weeks of treatment. In one of the other cases, in which there was congestion of the retinal vessels, causing intermittent amaurosis, the symptoms, which had long withstood all ordinary treatment, were completely subdued by means of heat to the spine." In two cases, to be presently mentioned, of great cerebral anæmia resulting in extreme prostration, and frequent fainting fits of long duration, a complete cure has been effected after all other methods have failed. I could mention many cases occurring in my own practice, in which I have obtained evidence that the cerebral circulation may be influenced in the manner described, but the foregoing facts will probably suffice to produce conviction of this truth. When it is considered that *le petit mal*, and the initial stage of *le grand mal* of epilepsy, consist of spasmodic contractions of the cerebral arteries, and that, in the intervals of the attacks, there are often sudden contractions like in kind but less in degree, and therefore not resulting in the abolition of consciousness; and, moreover, that all these abnormal contractions are due to excessive irritability of the nervous segments in the upper dorsal and lower cervical regions, it is plain that a remedy which will act as described must be of immense value in cases of epilepsy.

It is well known to all who see much of this disease, that in the intervals of the attacks the respirative functions are often more or less impaired and irregular, sighing respiration, and occasionally a slight suffocation, being perhaps the most usual symptoms, and denoting inadequate movement of blood through the lungs, or more or less pulmonary congestion, In innumerable instances I have seen the pulmonary circulation most decisively influenced by the applications of cold and heat between the scapulæ, and may cite the evidence of Professor Bencke, published in the Archiv für wissenschaftliche Heilkunde, in proof that pulmonary hemorrhage occurring in an advanced case of phthisis was rapidly and completely arrested by the application of two columns of heat, one on each side of the dorsal spine.

A frequent accompaniment of epilepsy, as well as of other disorders of the nervous system, is a tendency to sickness. I have not ascertained what proportion of the whole of the epileptics which have come under my care have been troubled with nausea or vomiting, but a considerable number have complained of these symptoms. Now, I believe I am justified in saying that the more experience physicians have of the treatment of these symptoms, the more readily they will recognise the great difficulty, and not seldom the impossibility of arresting nausea and vomiting of this kind by drugs. On the other hand I can state positively, from an extensive experience, that few diseases are more completely under control than are nausea and vomiting, if treated properly by means of the spinal ice-bag.

Among the chronic ailments to which epileptics are peculiarly liable, none, perhaps, is more troublesome and more intractible than habitual constipation, which, as a general rule, though temporarily relieved, is permanently increased by the frequent use of purgative medicines. This form of constipation is, in my opinion, due not to any lack, but to a superabundance of nervous energy transmitted to the bowels; the arteries supplying them are spasmodically restricted, and therefore convey an insufficient quantity of blood; the muscular coat of the intestines ceases to be adequately nourished, becomes more or less atrophied, and so losing more or less its contractile force, its vermicular and expulsive activity is impaired, and constipation is the result. In such cases, ice along the appropriate part of the spine, ought, according to my theory, to remedy this condition, and I can affirm with the utmost confidence, derived from experience in the treatment of a large number of cases, that in almost every instance it does so. When it is borne in mind the part played by large accumulations of fæces in the bowels in irritating the spinal and sympathetic centres, and thus inducing epileptic attacks, it will be conceded that it is difficult to overestimate the importance of restoring the healthy function of the bowels, and the value of any remedy which will do so.

Functional disorders of the womb are peculiarly condu-

cive to epileptic attacks in those already predisposed to them, and are an adequate cause of them in other cases. In my pamphlet on the "Functional Diseases of Women," I have given a considerable number of cases, proving that menstruation may be induced and increased by the application of ice along the lower third of the spine, and conversely, that menorrhagia may be controlled and cured by the proper application of heat in the same region. I also possess evidence that leucorrhea as well as certain grave affections of the male genito-urinary organs may be no less beneficially influenced in like manner. And finally, as I have already stated, when referring to Dr. Radcliffe's theories, the fact is now indisputably established, that almost every case of habitual coldness of the feet may be completely cured by the use of the spinal ice-bag.

It will, I am sure, be admitted that if these statements are true, they justify the strongest expectation that the therapeutical method in question, when applied in the treatment of epilepsy, is likely to be attended with an unusually large measure of success. This expectation has been so far justified by experience, that though, in common with every physician, I have been obliged not unfrequently to deplore failures, I can appeal to a considerable number of cases of epilepsy which I have cured, and to many others in which the benefit, both spinal and constitutional, has been so great as to justify a hope of cure should the treatment be persisted in.

Several of the cases in question exemplify in an extraordinary degree the efficacy of the therapeutical method which I have adopted. In these cases, the fits, which as will be seen by the following summary of them, ceased so speedily after its first application, that its power seemed almost magical:—

H. M. suffered from little fits, occurring generally about twice a day. I began to treat her February 24th, 1863: at the end of a fortnight the attacks quite ceased, and up to April 24th, 1865, when I last saw the patient, had never recurred.

C. J., male, had violent convulsive fits, recurring, on an average, his wife said, three times a day. I began to treat him May 16th, 1863: the fits ceased from that day until August of the same year, when he had one. Up to March, 1864, when I last heard from him, he had not had another.

S. G., male, suffered from little fits, each consisting of a period of unconsciousness preluded by a shriek. They recurred about a dozen times a day. I began to treat him June 10th, 1863: on the following day he had four fits, each, however, being unaccompanied by a shriek; and since then he has never had another.

Miss D. had convulsive fits, recurring several times a month. My treatment of her began January 10th, 1864: she had one attack during a week when treatment was omitted, and none afterwards up to July 9th, 1864, the last date at which I heard of her.

H. C., female, had convulsive fits about three times a month. She came under my care November 24th, 1864: she had two fits in January, 1865; and since that date she has not had one.

K. E., female, had violent convulsive fits, from twelve to twenty a month. She was first seen by me December 9th, 1865: during the first two months of treatment she had five fits; since that time she has had none.

S. T. J., male, had convulsive fits, varying in number from about six to ten a month. I began to treat him November 16th, 1865: he had one fit in January, 1866, and has had none since.

F. A., male, suffered from falling fits, occurring about once a week, from "swooning," which occurred many times a week, and very frequently from giddiness. He consulted me for the first time February 12th, 1866: up to April 23rd, when I last saw him, he had not had one falling fit, and the swooning and giddiness had quite ceased.

Mrs. A., suffered from fainting-fits of long duration and carying frequency, with excessive coldness of the surface of the body during the attacks, five or six of which occurred during the ten days previous to coming under my treatment, which began August 24th, 1864: she had one fit during the first week of treatment, but afterwards never had another.

Mrs. C., a patient in King's College Hospital, under the care of Dr. Playfair, suffered from fainting-fits occurring about eight times a week, sometimes oftener, and sometimes lasting an hour at a time. Dr. Playfair treated her by bromide of potassium and valerianate of zinc successively; but the fits continued as bad as ever. The spinal ice-bag was then applied—December 22nd, 1865: during the first week of its use she had only three fits, but afterwards, up to the last date of the report which Dr. Playfair kindly gave me, she had no further attack.

H. R., male, five months old, first seen by me July 13th, 1863. Had had fifteen attacks of convulsions during the previous month, five of which had occurred during the previous two days. There was great cerebral congestion, and the child having been treated vigorously by means of calomel, and blisters to the back of the head, was given up as a hopeless case by the medical attendant. By the use of the spinal ice-bag, the child was instantly soothed, and was soon completely recovered: he has never been convulsed since. He has been under my care at times subsequently on account of other disorders of the nervous system, from which he was quickly relieved; and only a few days ago he was reported to me by his father as being quite well.

I could adduce a considerable amount of additional evidence in proof of the astonishingly great therapeutical potency of the spinal ice-bag in treating the convulsive affections of children; and when it is borne in mind that in England every year about 24,000 children under five years of age are destroyed by convulsions alone, and that in a large proportion of cases the epileptoid diseases of adults originate in the convulsions of infancy, the value and importance of the method of treatment in question can scarcely be over-estimated.

As yet I have had no experience in the treatment of puerperal convulsions by means of ice: the practice has already, however, the sanction of the great authority of Dr. Todd, who testified to its efficacy; and I venture to close this paper with the prediction, that the judicious application of the spinal ice-bag will be found to exert over that apalling and not seldom fatal malady a controlling and remedial power, far surpassing that of all other means hitherto used for subduing the disease.

Dr. Camps said that the elaborate and admirable paper to which they had just listened was so comprehensive, and contained such a large amount of matter, that it was impossible for him to recall it all and bear it in mind, in order to offer any adequate comments upon it. He said he should only advert to two or three points. If he understood Dr. Chapman rightly, that the seat of the proximate cause of epilepsy might be located, in certain cases, in the lower parts of the spinal cord, he could not concur with him, for he was satisfied that the pneumo-gastric nerves must be morbidly excited as one of the conditions of an epileptic fit, and of course this implies that the medulla oblongata is involved. He quite agreed with Dr. Chapman in the opinion that Dr. Radcliffe's theory of muscular motion, as well as his pathology of convulsive affections, is unscientific and untenable; indeed he believed that no physician accepted his theories. He thought Dr. Chapman's paper so important, and so deserving of careful attention, that he hoped it would soon be printed, so as to be generally accessible, and suggested that Dr. Chapman should facilitate the discussion of the subject, by communicating to the Society an additional paper upon it before the close of the present session.

Dr. Routh could not refrain from adding his testimony to the great importance of the subject which Dr. Chapman had brought before them that evening. He said he had been to some extent a pupil of Dr. Chapman's, and had witnessed his treatment of certain cases at the Samaritan Hospital. The result was the production of certainty in his mind of the truth of Dr. Chapman's doctrine—viz., that the

circulation and nutrition of remote parts, or of the periphery of the body, may be increased by the application of ice along the spine, and may be decreased by the application of heat to the same region; also, that the functional activity of the spinal cord may be depressed or exalted in the same way. These facts, he repeated emphatically, are thoroughly established and indisputable. Being so, they opened up the prospect of a great therapeutical revolution. Every one must see this who bears in mind the very large proportion of diseases which may be treated most successfully by increasing or decreasing the circulation and nutrition of the parts morbidly affected; indeed, he did not hesitate to express his belief that even cancer might be beneficially treated by this method, and was confident that surgeons might derive great aid from it in various cases coming under their cognizance, especially when atrophy or hypertrophy was a leading symptom. In confirmation of his statements, he said the method had been tried in a case of what he called "convulsive action of the stomach," associated with pregnancy. The patient suffered from sickness continually for nearly three months; it was no use giving her drugs, for they came up again directly. She had been supported to some extent by injections per anum, but was in such a state of exhaustion that the question of inducing abortion, in order to stop the sickness, was entertained. By Dr. Chapman's advice the spinal ice-bag was applied: the immediate effect was the production of refreshing sleep; by continuance of the treatment the sickness steadily and completely subsided, and the patient is now well and gaining flesh. Dr. Routh said he had tried the method in a case of profuse menorrhagia: after the double columned hot-water bag had been applied during an hour, the flow ceased. He had also tested the principle in cases of infantile convulsions. In one case the child had twelve convulsions in one day, and, of course, under ordinary circumstances, could not, he said, be expected to recover: the convulsions ceased as soon as the spine bag was applied, have never recurred, and the child is now quite well.

The time having now arrived for closing the debate, Mr. Dunn moved, and Dr. Camps seconded the motion, that the discussion be prolonged for a quarter of an hour. The motion being carried, Mr. Dunn inquired of Dr. Chapman what effect is produced on the circulation; whether the pulse is increased in volume or not, by the application of the spinal ice-bag.

Dr. Sansum expressed the opinion that Dr. Radcliffe's theory is probably correct, or at least that numerous facts seem to countenance it. He observed that the rational treatment of epilepsy is very far from being comprised, as he understood Dr. Chapman to allege, in the treatment of the paroxysms; and that their provoking cause must be removed.

Dr. Broadbent did not think Dr. Chapman's theory of epilepsy an adequate one, and observed that the cases of cure which he had cited are cases in which the fits have been numerous, or cases of fainting-fits, and had not stated how long the disease had lasted in each case; that cases in which the fits are very numerous yield more easily to treatment than those in which the fits recur at more distant intervals. He testified to the great efficacy of bromide of potassium as a remedy for epilepsy, and said that he had never seen its use result in mental impairment.

Dr. Rogers expressed his sense of the great value of the paper which they had heard, and expressed a hope that Dr. Chapman would take an early opportunity of again bringing the subject of it before the members of the Society. While greatly interested in and disposed to accept Dr. Chapman's views, he wanted more facts in evidence of them, and must for the present regard them as *sub judice*, and maintain an attitude of reserve. He had, however, he said, nothing to allege against them, and hoped that further experience of their application would finally prove them true. His own experience tended in that direction. One of his children had convulsions during thirty-six hours: ice applied to the spine completely stopped the fits. And, quite recently, in two cases under his care, of whooping-cough followed by convulsions, the convulsions ceased to recur after the spinal ice-bag was applied.

The President, when about to call upon Dr. Chapman to reply, gave particulars of a severe case of epilepsy, in which the use of bromide of potassium had suspended the fits.

Dr. Edmonds asked permission to move the further prolongation of the debate. The motion having been acceded to, he said he felt a peculiar interest in the subject, in consequence of having lost a child by laryngismus stridulus. He mentioned the interesting fact that it was the constant practice of the late Mr. Gossett, well known in the neighbourhood of Old Broad-street, City, to prescribe in cases of infantile convulsions an ice-pillow, the ice being applied in a bladder to the occiput and nape of the neck. Dr. Edmonds also mentioned a case of tetanus, particulars of which he has published, in which he applied ice in an ox gullet along the spine, and rescued the patient from seemingly impendent death. She had been previously treated by two other medical men in the course of the eighteen hours during which the disease had been progressing, but without benefit. Her arms were firmly flexed, the hands being drawn together near the chin; the muscles were hard and rigid, and the woman was screaming in agonies of pain. Within half an hour after the ice was applied, she was wonderfully relieved, and very soon completely recovered.

Dr. Chapman, in the course of his reply, said he thought the difference between Dr. Camps and himself as to the parts of the nervous system primarily implicated in the production of an epileptic paroxysm, was rather one of words than substance. Dr. Chapman said he believed that epilepsy may be induced by a morbid state of the spinal cord as low down even as the lower third; but that when such is the case the irritation must be propagated upwards from the primary seat of the disease, as far at least as the level of those ganglia of the sympathetic which control the cerebral arteries, and that unconsciousness, the first stage of an epileptic fit, may be induced by irritation of those ganglia without any primary co-operation from the medulla oblongata, through the medium, as Dr. Camps alleges, of the vagi; of course, as soon as the brain has abdicated its functions as the co-ordinating power, the whole spinal cord, together with the medulla oblongata, acts automatically, in a tumultuous, chaotic, and aimless way, and thus constitutes the convulsive paroxysm. Replying to Mr. Dunn, Dr. Chapman said, that as a general rule, ice applied along the spine increases the peripheral circulation, and that heat so applied lessens it; that in the preface to his pamphlet on the "Functional Diseases of Women," he gave particulars of two cases, one of which was treated at St. Thomas's Hospital, the other at Guy's, in evidence of the truth of this proposition. He mentioned a case of intense hyperæmic headache, with hot dry skin, and pulse at 120, recently under his care, in which the application of the spinal hot-water-bag made the head cool, caused sweat to break out on the arms and hands, the pulse to fall to 80, and the pain in the head to cease entirely within half an hour from the time when the bag was first applied between the shoulders. He said that the susceptibility of patients to the influence of heat or cold applied to the spine differs extremely in different cases, and explained what he conceived to be the reasons of these differences. Adverting to Dr. Sansum's remarks, he explained that so far from his treatment of epilepsy being restricted to treating the paroxysm, he rarely treated it at all, but aimed, after removing the exciting cause, if any such were found removable, to exercise such an influence on the nervous system during the intervals of the fits as was most likely to prevent their recurrence. In reply to Dr. Broadbent, he said that some of the cases of cure of epilepsy which he had cited were cases in which the fits were not extremely numerous; for example, in three cases they recurred only three or four times a month; in several cases they had been of several years' continuance. He quite concurred in the general opinion of the meeting that bromide of potas-

sium, when given in moderate doses, does not usually produce the stupefying effects which, in some cases, are consequences of its use ; the objection which he urged to it on this ground was based on his experience of it in two cases, in which the mind had been markedly impaired by doses not larger than are commonly given. Dr. Chapman closed his remarks by thanking the gentlemen present for the attention with which they had listened to his paper, and the great interest which they had evinced in the subject he had brought before them.

Lectures.

CLINICAL LECTURES

DELIVERED IN

STEEVENS' HOSPITAL,

TOGETHER WITH

OBSERVATIONS ON PRACTICAL MEDICINE.

By Sir HENRY MARSH, M.D., Bart.,
PHYSICIAN IN ORDINARY TO THE QUEEN IN IRELAND.

Edited by J. STANNUS HUGHES, M.D., F.R.C.S.I.,
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OBSERVATIONS ON THE HEMORRHAGES.

(Continued from page 295.)

To another source of sanguineous exudation, nearly akin to that to which allusion has just been made, we must devote a brief consideration. During the progress of protracted chronic organic disease, the whole circulating mass undergoes a slow, gradual, progressive change, which ultimately gives rise both to hemorrhage and dropsy. During the long course of these diseases, the digestive and respiratory functions are impaired. The blood, imperceptibly, is altered, and the enfeebled exhalents allow either coloured or uncoloured blood to escape; the former usually from mucous surfaces, the latter either into the meshes of the areolar tissue, or into the serous cavities, or, as frequently happens, into both. The diarrhœas and profuse perspirations, which often characterize such cases, are referable to the same cause.

A case or two will best illustrate the subject. An officer returned to this country in broken-down health; he had suffered for many months from frequently recurring attacks of intermitting fever. The fever and ague were caused by the malaria of Hong Kong. His liver was considerably and permanently enlarged, the spleen enormously hypertrophied; he was much atrophied; but the paroxysms of ague had ceased. Soon the ankles became œdematous, and blood trickled almost constantly from the nose, and, curiously enough, it happened here, as in a few other cases of this nature which I have witnessed in which there was great enlargement of the spleen, the blood flowed exclusively from the left nostril. The trickling of blood from the left nostril continued for many days; it ceased; he became universally dropsical. He lingered on for a long while in a hopeless condition. During the whole lengthened course of the disease he was unable to receive and digest a sufficient quantity of food (even of the lowest quality) to create a normal supply of blood. Such is the epistaxis so often symptomatic of diseased liver and spleen.

A labouring man, suffering from the effects of tuberculated liver, caused by habitual imbibition of alcohol in large quantities, was suddenly attacked with melæna. Blood was vomited, and descended through the intestinal tube to an enormous amount. He was brought to the threshold of the grave ; he could neither speak nor move ; for hours he was pulseless ; he remained and continued to be deadly pale. There was no second attack of hemorrhage, but a dropsical effusion soon after manifested itself. The effusion into the sac of the peritoneum was very great. He derived, more than once, temporary relief from tapping. At first, the dropsy was not extended beyond the areolar membrane and cavity below the diaphragm. The upper and lower halves of the body presented a singular contrast ; that above the diaphragm exceedingly attenuated ; that below swollen out to a great size. Afterwards, as the structure of the blood became more and more impaired, the dropsy was universal. This man's liver presented the usual appearance of that which has been termed the whiskey liver.

About two years ago I attended a lady in her thirty-fourth year, in whom epistaxis, towards the close of the disease, appeared, at once difficult to control, and, in her exhausted state, fearfully debilitating. Before her marriage, she had laboured under chlorosis. Soon after her marriage (ten years previously), pleuritis, with great effusion, had nearly terminated her existence. The right side remained ever afterwards contracted. Her recovery, however, was so complete, that she became the mother of a fine child. About twelve months before her death, an abdominal moveable tumour caused her much uneasiness ; this disapeared. She then suffered from uterine irritation, and lastly, enlargement of the liver. Ascites, and dropsical effusion confined to the lower extremities, with sometimes profuse perspirations, sometimes wasting diarrhœas, were the prominent symptoms. About six weeks before the fatal termination of the disease, she bled periodically from both nostrils. The bleeding always took place early in the morning, on awakening from a short, broken, and disturbed sleep. The first bleeding was the most copious, and caused a sudden and great change in her whole aspect and appearance. The subsequent bleedings, which recurred daily at the same hour, were far less profuse, yet, to her, extremely debilitating. For ten days the epistaxis recurred regularly ; it then became less frequent and less regular, and, for at least a fortnight before her death, wholly ceased. This patient was to the utmost possible degree attenuated. Thus was epistaxis co-existent with dropsy; and both the result of protracted chronic exhausting organic disease. Many, indeed, are the chronic diseases, which, either with or without specific fever, terminate in effusions of blood, both coloured and uncoloured.

Sometimes an altered and deteriorated condition of the blood, productive of epistaxis and other hemorrhages, is caused by the frequent and long continued introduction into the system of poisons, such as malaria, mercury, alcohol, tobacco, &c.

Not many days ago I saw, a case of a young man in whom purpura hemorrhagica, in its most fearful and fatal form, was produced solely by the habitual abuse of these poisons, particularly alcoholic. His family, by his death, sustained a great loss. His habits of life were suicidal.

A corresponding case, one in many respects resembling that reported at the commencement of this paper, fell under my observation about three years since. It was that of a young man who, influenced by injurious companionship and an almost unlimited command of newly-acquired wealth, plunged unrestrainedly into every species of sensual indulgence ; habits of intoxication became so inveterate, that at no time of the day was he perfectly sober ; rarely was he seen without a pipe or a cigar in his mouth ; courses of mercury for the cure of syphilis succeeded each other in quick succession. For nearly three years this course of life, without any apparent detriment to health, was persisted in. In about a fortnight after he had been exposed to the infection of small-pox, he sickened ; having for two days struggled against prostrating disease, he was compelled to succumb, and to remain in bed. He complained of little else than of (as he termed it) distressing lumbago. On the morning of the third day a rash was discovered ; and after the lapse of some hours the exanthem exhibited the characters of the variolous eruption. Long before the vesicles approached maturation they not only ceased to fill, but so far subsided as in a great degree to lose their specific features. Livid and black were now the numerous petechial spots, of various sizes, with vibices and large ecchymoses, which unexpectedly appeared over the whole surface. It was remarkable how

abruptly this fatal change took place; till then the case presented no other characters than those of variola with fever. Soon, thin, dark blood began to trickle from the nares, from the angles of the mouth, and many mucous surfaces. The odour emanating from the whole surface was insufferable. Before death he was semi-putrid. On the fourth day from the appearance of the black petechiæ, e died. Thus it was that a previously poisoned blood rendered an accidental febrile disease speedily and inevitably fatal.

It is lamentable to think how many young men there are who run this mad career of excess, unaware of the fatal sword which is suspended over them. They fling away life, health, and real enjoyment, as an untutored savage discards a valuable mass of precious metal, and clutches a string of worthless but glittering baubles. Months, even years, may elapse without any warning of danger; an attack of some prevailing epidemic, or of inflammation or fever, comes unexpectedly upon them. The chances of recovery, the chances of triumphing over the disease are, to them who have so lived, an hundred-fold diminished. Such is the hemorrhagically fatal effect of the gradual and prolonged infusion into the system and blood of those substances which in habitual excess become slow but virulent poisons. I cannot readily forget the observation of a lady whose husband was dying of fever, to which, at an early period of the disease, the appearance of lurid petechiæ with utter prostration, gave an all but hopeless character. She had herself abandoned all hope, having been painfully cognizant of the ruinous career he had for years previously been running. Alluding to his hopeless state, she said: "He has squandered away a fine constitution, an exalted intellect, and a princely fortune; all these valuable gifts he has sacrificed on the altar of unrestrained sensuality: on his offspring he has entailed impaired constitutions and poverty."

Several years ago I witnessed a remarkable and fatal case of supervening purpura hemorrhagica. So slight were the symptoms, that the note in which Sir Philip Crampton was requested to see this gentleman was couched in language which did not lead him to suppose that aught in the slighest degree of import ailed; it had reference principally to some trivial and non-medical subject about which he wished to speak with Sir Philip Crampton. The note concluded by observing that, if he happened to pass that way, he would be glad to see him, as he did not feel himself quite well enough to call at Sir Philip's house. I mention this to show how slight the premonitory and existing symptoms at that time were. Certainly, one not well acquainted with the earlier characters of this fatal disease might easily be thrown off his guard. Sir Philip, however, did not fail to recognise its true nature and its danger, though at his first visit there was apparently little in the characters of the case to warrant any, even the slightest apprehension. He found him sitting up, and in the act of writing a note; he was advised to remain in bed. On the following day the prominent symptoms were, fever, a dusky red rash, generally diffused, soreness of the throat, singular prostration of strength, and severe pain in the lumbar region. After the lapse of a few hours the appearance of livid petechiæ, numerous vibices, large ecchymoses, particularly wherever pressure, even the slighest, happened to be applied, evinced but too certainly the rapidly fatal tendency of the disease. At the end of three days from the time when re-action was established, he expired. It was a remarkable fact that, having been cupped over the loins, back, ichorous blood never ceased to flow from the wounds inflicted by the scarificator, till he ceased to breathe. This gentleman held an official situation, which, for many hours daily, confined him to the desk. What the predisposing and exciting causes of a disease so malignant, so hurriedly fatal were in this case, I am unable to tell. Cases do occur which, in the present state of our knowledge, baffle all our efforts to throw a clear and satisfactory light upon their origin and causation.

DUBLIN UNIVERSITY PROFESSORSHIPS.

A BILL entituled an Act to open the Professorships of Anatomy and Chirurgery, Chemistry and Botany, in the University of Dublin, to all Persons irrespective of their religious Creed; and to amend the Act 40 Geo. 3. (Ireland), Chapter Eighty-four.

Whereas under the provisions of an Act passed in the Parliament of Ireland in the Fortieth Year of the Reign of King George the Third, Chapter Eighty-four, the Professorships of the University of Dublin of Anatomy and Chirurgery, Chemistry and Botany, are now by Law limited to Protestants of all Nations.

And whereas it is expedient to remove the said Disability, and to open the said Professorships to all duly qualified Persons, and otherwise to amend the said Act:

Be it therefore enacted by the Queen's most Excellent Majesty, by and with the Advice and Consent of the Lords Spiritual and Temporal, and Commons, in this present Parliament assembled, and by the Authority of the same:

1. *Removal of Disabilities.*—That from and after the passing of this Act the said Professorships of Anatomy and Chirurgery, Chemistry and Botany, in the University of Dublin, shall be open to Persons of all Nations, and that Candidates for the said Professorships or for the Professorships on the Foundation of Sir Patrick Dun shall not be subject to any Disability on account of Religion, or Want of a Medical Degree from any University.

2. *Election of King's Professors.*—Sections Fifteen, Sixteen, and Seventeen of the said Act are hereby repealed, and in lieu thereof be it enacted, That the said King's Professors shall be elected by the President and Fellows of the King's and Queen's College of Physicians.

3. *Delivery of Clinical Lectures.*—From and after the passing of this Act the said University Professors of Chemistry and of Botany shall cease to deliver the Clinical Lectures required by the said Act of the Fortieth Year of King George the Third, and instead thereof such Lectures shall be delivered by the Professor of Surgery in Trinity College, and the University Anatomist: and the said Professor of Surgery and University Anatomist shall be respectively entitled to the Fees payable heretofore to the said University Professors of Chemistry and Botany: Provided always, that nothing herein contained shall affect the Rights of the present University Professor of Chemistry in the event of his electing to deliver such Lectures during his Tenure of such Professorship.

4. *Power to appoint a Clinical Lecturer.*—In case any of the King's Professors or University Professors, or the University Anatomist, shall neglect to attend the said Hospital, or deliver Clinical Lectures, as required by the said Act, it shall be lawful for the President and Fellows of the King and Queen's College of Physicians, in the Case of the King's Professors, and for the Provost (or in his Absence the Vice-Provost) and Senior Fellows of Trinity College, Dublin, in the Case of the University Professors and University Anatomist, to dispense with his delivering such Lectures; and in such Case it shall be lawful for the said President and Fellows of the said King and Queen's College of Physicians, and for the Provost (or in his Absence the Vice-Provost) and Senior Fellows of Trinity College, Dublin, respectively, to appoint a Physician or Surgeon to attend the said Hospital and deliver the Clinical Lectures in the Place of such Professor so neglecting to lecture; and the Physician or Surgeon so appointed shall be entitled to receive and be paid the Fees to which the Professor so neglecting to attend the said Hospital and deliver such Lectures would have been entitled.

5. *Power to make Regulations respecting Lectures.*—That the Thirty-first Section of the said Act be repealed, and in lieu thereof be it enacted, That it shall be lawful for the President and Fellows of the King and Queen's College of Physicians, in the Case of the King's Professors, and for the Provost (or in his Absence the Vice-Provost) and Senior Fellows of Trinity College, Dublin, in the Case

of the University Professors, each College with the Assent of the other to make Regulations respecting the Lectures to be given by its own Professors: Provided always, that if either the President and Fellows of the King and Queen's College of Physicians, or the Provost (or in his Absence the Vice-Provost) and Senior Fellows of Trinity College, shall refuse to agree to the Regulations proposed by the other College, in such Case the Regulations so proposed shall be submitted to the Visitors of the College which refuses to agree to them; and it shall be lawful for such Visitors, and they are hereby required, upon hearing such Reasons as may be offered on both Sides, to determine whether the Regulations submitted to them shall or shall not be adopted, and the Decision of such Visitors in any such Case shall be final and conclusive.

6. *Salary of Professor of Midwifery.*—And whereas by the Tenth Section of the said Act it is enacted, that after the Hospital therein mentioned should be completed, and after defraying the Charges arising from the Salaries and Expenses therein also mentioned, and the necessary Expenses of maintaining One hundred Patients, and the Establishment of such Hospital, which shall not be defrayed by private Contributions, then the clear annual Surplus of the Rents of the Estates therein mentioned shall be applied in the first place to support a Professor of Midwifery, who shall have a Salary of One hundred Pounds a Year, and no more: And whereas it is expedient to provide such Salary for a Professor of Midwifery irrespective of such Restriction: Be it enacted, That from and after the passing of this Act such Professor of Midwifery shall be entitled to receive and be paid the Salary of One hundred Pounds (late Irish Currency) per Annum out of the Rents of the said Estates; and that in consideration of such Salary the said Professor shall give Instruction in the Diseases peculiar to Females and in practical Midwifery in connexion with Sir P. Dun's Hospital; and that each Student availing himself of such Instruction shall pay to the Governors of the said Hospital the Sum of Three Guineas annually, to be applied by them to the Maintenance of Beds for the Treatment of Diseases peculiar to Females; and that each Student shall further pay to the Professor of Midwifery such Fees as shall be authorized by the Governors of the said Hospital, with Consent of the President and Fellows of the King and Queen's College of Physicians, and of the Provost and Senior Fellows of Trinity College.

7. *Management of Library.*—That Section Twelve of the said Act be and the same is hereby repealed: And whereas in addition to the Salary of the Librarian appointed under the Provisions of the said Act, being the Sum of Seventy Pounds (late Irish Currency), a Sum of Thirty Pounds per Annum has been for several Years applied to the Purchase of Books for a Library, and the Sum of Six Pounds Six Shillings to the Payment of a Library Porter: Be it enacted, That such Salary and Payments for the Purposes aforesaid shall continue to be made; and that it shall be lawful for the President and Fellows of the said King and Queen's College of Physicians to make such Rules and Regulations as to them shall seem necessary and proper for regulating the Duties of such Librarian, the Purchase of Books, and the Management of the said Library.

8. *Vacating of Fellowships.*—Whereas by the Forty-first Section of the said Act it is enacted that every Fellow of the said College who should thereafter accept any of the said Professorships should by such Acceptance immediately vacate his Fellowship in the said College of Physicians, and it is expedient that such Provision shall be repealed: Be it therefore enacted, That after the passing of this Act the accepting of any of the said Professorships by a Fellow of the said College shall not vacate his Fellowship; and that the present Professors, who on accepting their Professorships vacated their Fellowships, shall be and are hereby restored to their Fellowships in the said College, and all the Rights and Privileges thereunto belonging.

9. *Short Title.*—This Act may be cited for all Purposes as "The School of Physic (Ireland) Amendment Act, 1867."

Review.

PHYSIOLOGICAL REMARKS UPON THE CAUSES OF CONSUMPTION. By Valentine Duke, M.D., Fellow of the Royal College of Surgeons, Ireland; Licentiate of the King and Queen's College of Physicians. Dublin: Fannin and Co., Grafton-street. London: Longman, Green, and Co. 1867. Pp. 108.

Few diseases have attracted more attention than phthisis. Nor need we wonder at this. Though not met with in every region of the globe, it is, at any rate, in one or other of its forms a very wide-spread affection. But it is more common in some countries than others, and of these Great Britain and Ireland come in for more than their share. It it just possible that this is due, in great part, to the vicissitudes of our climate. Whether this be so or not, the fact is certain that consumption is with us a very common disease. Though it must be allowed, also, to be a very fatal affection, still it is pleasant to think that the last quarter of a century has seen a very marked improvement in our treatment of the disease. The morbid anatomy may now be considered to be well known; also the natural history—that most important knowledge to the physician. But, above all, we have gained the greatest steps in the improved treatment of the present day. The introduction of the cod liver oil would alone form a new era in the management of phthisis. Not that it is to be considered a panacea for this formidable disease; but that properly used, that is, in suitable cases, and in suitable stages of the complaint, it has proved to be the greatest opponent—if we may so speak—to the advance of phthisis of any agent discovered in modern times: and if used at a stage of the disease when tubercles have not yet been deposited, there are the best grounds for believing that the patient may be completely cured. Independent, however, of the intrinsic value of the cod liver oil, it has taught the profession the great importance of the use of oily substances in general in the management of phthisis; such as are used in different kinds of food, so that there is now no better established fact in medicine than that these substances constitute very great helps in treating phthisis, and the state of constitution out of which it arises.

It has been just said that the treatment of consumption has made a great stride of late years, and we have glanced at some of the means adopted for the purpose. But there is still another aspect in which the subject can be considered, and not of less consequence than that of which we have been speaking. We mean what may be called preventive measures, and which of late have attracted much attention. It is in this point of view that the work before us has been written, the object of the writer being to impress on his readers the great importance of dealing with the constitutions of those who might be likely to get phthisis, before any changes had occurred in the lungs. That this is an object of the first importance admits of no question, and that when early consulted in such cases the physician can do a vast deal in preventing the onset of the disease is equally certain; and we give the author great credit for again bringing it under the notice of the profession. His observations are all sound, and show an accomplished physician; but farther than this we cannot go. We have used the word "again" advisedly, for we cannot give our author credit for any originality in this matter. In all the most recent works on phthisis there is, if we recollect right, much said about the prevention of the disease, and separate chapters are devoted—in some of them at least—to this special object. When one member of a family has been carried off by phthisis, it is only natural that the greater attention should be given to the survivors; in other words, that preventive measures should be adopted with them. And speaking of preventive measures leads us to say that we entirely concur with our author that the deposition of tubercle in the lungs is always preceded by a period more or less prolonged of what may be called bad health, and which very commonly, indeed, shows itself in some form of dyspepsia. In truth, the food is not assimilated properly; there is mal-nutrition, which may go on for months, or even years, and then a common cold, it may be, or sudden hæmoptysis at once usher in the disease, which goes on too surely to a fatal result. But as all these points are well put by our author, we must refer our readers to his work, in which they will find many practical remarks, bearing chiefly on means of preventing this fatal affection.

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The Medical Press and Circular.

"SALUS POPULI SUPREMA LEX."

WEDNESDAY, APRIL 3, 1867.

THE MEDICAL ELEMENT IN THE HOUSE OF COMMONS.

It cannot be a matter of wonder that the Medical Profession has very little influence in the House of Commons, when we examine the constitution of that assembly, and find that when all other professions, trades, and pursuits are fully represented, Medicine is left almost without a voice in the Great Council of the Nation. From a summary recently published in a work named *Debrett's House of Commons*, we find the relative number of the members representing different interests, and the perusal is certainly both amusing and instructive. Thus, we find that there are no less than 128 members of the Bar, unequally drawn from England, Ireland, and Scotland, the English contingent being greatly preponderant; and there are nine who are, or have been, in practice as solicitors. Commissions in the army are, or have been, held by 112 members; commissions in the navy by 13, in the yeomanry by 65, in the volunteers by 68, and in the militia by 60—thus giving 318 members to represent the combatant elements. Authors and editors appear to the number of 81—128 are directors of public companies, 109 are bankers, merchants, manufacturers, or in business of a similar kind; and what, after this enumeration, is the proportion of medical practitioners? Why, *three* are, or have been, in the Medical Profession, and these three are, we believe, Dr. Brady, who is no longer in practice; Mr. Vander Byl, who has also relinquished Medicine for mercantile pursuits; and Mr. Clement, who is the only avowed representative of our Profession. Such is the modicum of bread to the intolerable quantity of sack, when we compare the Medical element in the House of Commons with the hosts of placemen, lawyers, bankers, merchants, and officers in the army and navy, who make up the bulk of the popular branch of the Legislature. In the House of Peers, Medicine figures even more disadvantageously, for there we have never had a representative at all, although the officers of the army and the navy, and the placemen, and the lawyers, and the bishops in addition, abound in scores.

The Universities of Oxford, Cambridge, and Dublin are all represented, and in any Reform Bill which may pass the Legislature, some other Universities will no doubt be admitted to the franchise; but why, we would ask, are the Colleges of Physicians and Surgeons, and other Medical Bodies in the three divisions of the British Empire, to be excluded from a participation in the boon which has been extended to other learned corporations? and why should the Profession of Medicine, numbering its members by thousands, and being surpassed by no similar class of society in learning, in influence, and in honour, be denied the right of pleading their own cause in the only assembly where their voice can command attention and respect?

When any question is started in the House involving the interests of the lawyers, it is edifying to observe the alacrity with which the discussion is taken up, and any attack on the supposed interests of the order is vigorously contested, and the same is the case with the military or naval professions, and with the Church, which last, fully represented in the House of Lords, has plenty of indirect supporters even in the Commons. But any question affecting the Medical Profession is either summarily disposed of, or is allowed to languish, or finally to die out for want of advocacy.

Now, we are not asserting that it is necessary for a large phalanx of Physicians and Surgeons to be present in the House of Commons in order to defend either their private or their common interests, although we should rejoice to find the proportion of medical men greatly increased; but we consider it absolutely essential that medical science should have some competent exponents in Parliament, in order to assist in the work of legislation and in the preparation of measures concerning the public health. The lamentable absurdities often advanced by Members when they touch on matters connected with Medicine or Hygiene might, at least, be counteracted by the intelligent utterances of educated Physicians or Surgeons competent to speak on the subject under discussion, and many measures of vital importance to the health of the community might be passed, if Medicine were not practically excluded from the walls of St. Stephen's.

Take, for example, the prevention of small-pox, and the adoption of efficient means in order to secure the performance of vaccination, and what a series of blunders and absurdities do we find committed in a matter, which, when viewed by the light of science and experience, admits of a simple and easy solution. Men who have been educated at Universities, and who may be supposed to have learned at least the elements of logic, hesitate to support measures for

the efficient vaccination of the people, although statistics have proved, in innumerable instances, the preventive character of this mild operation, when properly performed and universally practised, and, year after year, small-pox continues its ravages while the Legislature is *thinking* how to prevent them.

Again, have not the Medical Profession a right to demand that the representations of the Medical Council of Education and Registration should receive at least a respectful degree of attention from the House of Commons? That Council has repeatedly declared that the Medical Bill of 1858 is quite inadequate to fulfil the objects for which it was avowedly passed, and repeated entreaties have been addressed to the Ministry and to individual Members to support a measure having for its aim the improvement of this very defective enactment; but all their solicitations have hitherto been of no avail. Now, the object of the Medical Council being only to introduce such modifications as may distinguish medical men from quacks and impostors, is it likely that so modest a boon would be refused or disregarded if the Profession were represented in the British Parliament? Quack lawyers and quack soldiers are unknown, because the legal and the military professions take good care of themselves through their representatives, and it is unfair that Medicine, one of the most noble, useful, and ancient pursuits, should be left to struggle, as best it may, with the host of impostors who are allowed, with impunity, to sully its well-earned fame, and to rob it of its fair emoluments.

WIGHT *V.* WIGHT AND FIELD.

The annoyances and persecutions to which medical men are constantly exposed, and the danger of losing character by which they are surrounded, have been once more exemplified in the case of Mr. Field. The verdict of the Divorce Court, it is true, completely justifies Mr. Field, and effectually rebuts the slur attempted to be cast upon him. But what a fearful amount of anxiety has thus been inflicted upon an innocent man. When we reflect upon the ease with which unprincipled persons may trump up charges of this description, we feel how great are the risks daily run by professional men in their ordinary avocations. The case under consideration illustrates this in more than one way. Here charges were actually brought forward in reference to transactions that occurred a dozen and fifteen years ago, and in support of them the idle gossip of a set of servants, who were at that period in the service of Mrs. Wight and Mr. Field, was submitted to the jury. We congratulate the defendants that their testimony was discredited, but we cannot conceal from ourselves the concern with which this state of things impresses us. Mr. Field was fortunate enough to have a number of ladies and gentlemen, who knew all about the case, ready to come forward and speak of his character. But how would such a charge be refuted by a member of our profession practising in an obscure district, or living a retired life? It seems intolerable, but it is a fact that a medical man may, at any moment, have the purest reputation sullied by the malicious slander of a discharged servant. He may at any moment be called upon to refute baseless calumnies which present a certain plausibility from their being interpretations of facts connected with his every day duties, and when the breath of suspicion falls upon any one in such a case, how many "knowing ones" of the hard world will be ready to accept the charges without proof.

It is this view of our dangers which has doubtless moved some of Mr. Field's professional friends to express in a public and formal manner their sympathy with him. Last week a preliminary meeting presided over by Dr. Sibson was held for this purpose, and as these sheets emerge from the press a public meeting is being held at the Marylebone Institution for the purpose of taking such steps as may be considered advisable in the matter. Dr. Copland, F.R.S., occupies the chair, and Dr. Longmore acts as honorary secretary. Our next impression will probably contain a report of the proceedings. Meantime, we are sure that a mere feeling of self-defence will secure for Mr. Field such an expression of sympathy from his professional brethren as cannot fail to afford him some consolation in the sad trial that has overtaken him. Whatever may be determined upon, we doubt not that the support of the Profession will be hearty and very generally diffused, and as the whole nation is known to cherish a hatred for all persecution, we see no reason why the public might not be invited to join in the movement.

SCHOOL OF PHYSIC IN IRELAND.

In a leading article in our Special Edition for Ireland of the 13th of March, we fully informed our readers of the nature of the Bill, then before Parliament, on this subject; and we promised to give them the Bill itself as soon as its provisions had been definitely settled. In the present number we have much pleasure in redeeming our promise, and we give the Bill as it has passed both Houses, and now awaits the Royal assent.

CHOLERA REPORTS OF THE DUBLIN HOSPITALS.

The Reports of the various Dublin Hospitals which admitted cholera cases during the late epidemic were laid before a meeting of the Medical Association of the King and Queen's College of Physicians, held on the evening of

March 27th, and will be discussed at the adjourned meeting of the Association, to be held on April 4th. We have carefully compared the various Reports, and shall now state the results of these comparisons, and in the following table we have endeavoured to epitomize the statistics contained in the Reports furnished by the Meath, Sir Patrick Dun's, Mater Misericordiæ, Mountjoy Prison, and House of Industry Hospitals :—

Name of Hospitals.	Admitted.	Died.	Recovered.	Deaths per cent.	Cubic space per Patient.	Attendants attacked.	Other Patients attacked.
Meath ...	130	67	63	51·5	Wd. 644·5 Shds. ...	2	2
Sir P. Dunn's...	180	85	95	47·2	2500		
Mater Misericor.	197	106	91	53·8	2000	1?	0
Mountjoy Pris'n	9	4	5	44·4	*ad libitum*	0	0
House of Indust.	277	129	148	42·8	740	1-1?	5
Total...	793	391	402	49·3	1177	4 or 5	7

The total number of cases treated was 793 ; of these 391 died, and 402 recovered. As all the reports, except that from the House of Industry Hospital, include diarrhœa cases, we thought it right to add the similar cases to those of cholera, reported from that institution, thus lowering the rate of mortality from 66·3 (for purely cholera cases) to 42·8, which number appears to us most nearly to correspond with cases tabulated as cholera in the other hospital reports. The total average mortality from cholera in the Dublin Hospitals above mentioned was 49·3, in round numbers, 50 per cent., which corresponds closely with that of other cities where the epidemic prevailed. The epidemic reached its height in October, the number of admissions into each hospital having reached its maximum in that month ; the total number of admissions being, for July, 1 ; August, 55 ; September, 173 ; October, 217; November, 81; December, 21. The Meath Hospital is not included in this estimate, as its report does not furnish the details. The females seem to have suffered more than the males, as shown by the reports from the House of Industry and Sir Patrick Dun's Hospitals. In the former of 148, 72 were males and 76 females. In the latter of 193 (genuine cholera), 80 were males and 113 females. The mortality also among the females seems to have been greater. In Sir Patrick Dun's the mortality was, males 41 per cent., females 44. In the Hardwicke (House of Industry) it was, males 60 per cent., females 70·8, showing a large balance against females ; of the latter admitted into the Hardwicke Hospital a large number of them were aged, and among them the death-rate was remarkably high.

As regards the question of contagion we must say, in our opinion, the reports are rather against cholera, being considered contagious, except in a minor degree. The report from the Mountjoy Prison seems almost to include the possibility of contagion, and all the reports taken together show the disease at the most to be but slightly contagious, inasmuch as of the numerous attendants on 793 cases only 4 or 5 were affected by the disease. The great cubic-space in Sir Patrick Dun's is given as a reason for the good health of the attendants there, but this can scarcely have much weight in favour of thinking contagious particles were present, but rendered innocuous by dilution ; for we find in the Hardwicke, where the number of patients was very large, and the cubic space by no means so great as that in Sir Patrick Dun's, that there were *only* two individuals attacked ; neither does the disease seem to have spread to any considerable extent among the ordinary patients, there being only 5 out of 428 in the Hardwicke, and 2 in the Meath, out of a large number, attacked by the disease.

As to treatment, all the reports seem to favour astringents, and to point to the inferiority of purgatives and calomel. In the Hardwicke, calomel seems to have been especially unlucky, numbering 31 deaths to 16 recoveries. None of the newer remedies (such as Calabar bean, camphor, &c.), seem to have rendered much effectual aid. At the Meath, camphor and chloroform were found valuable in allaying cramps of the stomach.

We regret we cannot reduce the statements from all the reports into one table from the manner in which they are constructed, although the general agreement between them is remarkable.

The report from the House of Industry is in every way superior to those from the other public hospitals. The Mountjoy Prison report is unique in exactness and in the arrangement of the details.

Notes on Current Topics.

The Late Professor Goodsir.—On the 20th March, a meeting was held by the medical authorities and other celebrities of Edinburgh to institute a Memorial to Professor Goodsir, and to commemorate his services in the cause of Medical Science. We shall best show the object of the meeting by referring our readers to a full report of the meeting which appears in to day's issue. By the resolution unanimously adopted it will be seen that the Goodsir Fellowship is conferred upon the student who has most distinguished himself in the sciences of anatomy and physiology. All the speakers paid a hearty and well deserved tribute to the late Professor, both as regards his scientific attaintments and personal qualities. Nothing can be more fitting than to perpetuate the memory of a Professor in the University of which he was so conspicuous an ornament, and for which his name and services have done so much. A Committee was appointed to collect subscriptions, and frame regulations for the Fellowship, and we doubt not that a hearty response will be made to this appeal for the support and approval of his numerous admirers.

New Medical Baronet.—The veteran Lawrence, Sergeant-Surgeon to the Queen, is numbered amongst the last list of persons promoted to the distinction of a Baronetcy of the United Kingdom. It would be superfluous for a medical journal to point out the claims to honour which the name of Lawrence may recall to medical men throughout the country. To the individual who has for so many years occupied a position which a dignity of this kind cannot raise, this recognition can be of little real value, while the distinction is not in itself sufficient to raise the gratitude of our brethren for the honour thus done to their Profession. Few, indeed, are the prospects offered by wealthy England to those of her children who devote themselves to the healing art. The church and the law have secured to themselves a large preponderance in our constitution, and their followers occupy numerous honour-

able and profitable positions. Medicine pursues its career unaided, uncared for, almost unprotected by the State, and those who embrace it as a calling thereby practically renounce wealth, titles, and influence. Abroad our Profession is much more respected, its members are much more frequently decorated. Last week we pointed out the niggardly hand with which social distinctions are conferred on our military and naval brethren. The announcement of a Baronetcy for Lawrence reminds us that in any other country he would have been recognized half a century ago. In spite of the immense benefits conferred on the community by the profession, we are completely excluded from higher dignities, and though including in our ranks scores of men who have achieved world-wide reputations our baronets may be counted on the fingers.

Officer of Health, Southampton.—The extra work imposed on Dr. MacCormack during the cholera epidemic has, it appears, been under the consideration of the Sanitary Committee, who have awarded him what he considers an insufficient payment. He has therefore addressed to them a remonstrance, which he has published, and in which he quotes an opinion given by Mr. Keane, Q.C., on the subject, which is as follows:—"That under the order in Council for putting in force the 'Diseases Prevention Act,' the services of the Officer of Health were not required to be given in consideration of his salary, and that he was clearly entitled to claim extra remuneration." Nothing is more fair than that every man should be paid in proportion to the work he has done; and as the services of Dr. MacCormack were required in an unusual degree in attending temporay hospitals and various other ways, it is to be hoped the committee will not disregard the remonstrance he has presented to them.

Convalescent Hospitals.—Half the diseases and more, that flesh is heir to, owe alike their prevalence and intensity to the want of pure air. Watch the ruddy, wholesome countenance of the country resident, and compare it with the pallid and exhausted features of our city population, the difference is remarkable in the extreme; and to what is it attributable if not to their relative position and circumstances. The one who luxuriates in the fresh air of the open fields is the picture of health; the other who breathes by day and by night the sickening and depressing atmosphere of a crowded and polluted locality, if not the victim, is the ready prey of disease. So if the liability is thus plainly marked, the grasp of disease is not less so. Ordinarily, in the one case, it yields more easily to curative agency; in the other it is extensively powerful and destructive. While, then, we have in London, and other large and manufacturing towns, our hospitals and infirmaries to which the poor can gain ready admission, where they will be under the very best professional advice, and attended by most experienced nurses, indeed, where they have every thing best adapted to facilitate recovery, they remain after all more or less under those unfavourable atmospheric conditions which must still have an effect upon them, and retard to a considerable extent their recovery. Mrs. Gladstone is doing a praiseworthy work in the establishment of a Convalescent Hospital for the East end of London. We hope all will join heart and hand in the undertaking, that her object may be accomplished, and that the poor of that crowded district may have an opportunity of quaffing the sweet air of the country when they leave their sick beds, and so gain a full measure of health before returning to their ordinary employments.

Alarming Cattle Disease.—A disease of a very alarming character has broken out among a herd of cattle belonging to Mr. John Mill, of Penpill farm, near Callington, Cornwall. Within a few days fourteen bullocks have succumbed to the disease, and several others are in a critical state. One pig has also died from the same cause. Several veterinary surgeons have examined the diseased animals, but have been unable to decide upon the nature of the disease, which they are all of opinion is not rinderpest. Professor Symons is engaged on an analysis and examination of the internal organs of some of the animals which have died. The outbreak has caused great uneasiness and alarm in East Cornwall.

Strange Affair.—The *New York Times* of the 7th inst. makes the following statement:—"A terrible case of hydrophobia is chronicled in the Detroit papers. A little daughter of Mr. Alfred Woodruff, of the town of Greenfield, Michigan, was bitten some time ago by a dog, but no symptoms of hydrophobia were at first shown. At length the poison, which, acting as a sub-cutaneous injection, permeated every tissue of the system, broke out in a severe form, causing the most intense suffering. A consultation was had by physicians, who decided that, as the sufferer could not possibly survive, every consideration of humanity demanded that her sufferings be ended by some means, in accordance with which, during a severe paroxysm, the child was smothered to death."

Southampton Infirmary.—Whether in consequence of our representations or not, we are glad to perceive a somewhat more moderate tone in the discussion that is still going on respecting this institution. A letter by Mr. Scrase in the *Southampton Times* deals with the question in a very moderate spirit, and we trust that gentleman may, in any future discussion, meet with the consideration he deserves, for it is undeniable that many reforms, long pronounced needful, have not yet been effected, and the endeavour to attempt them is by no means an enviable task. It is singular that at this very moment a resignation should have occurred, and thus a touchstone will be applied in reference to the election of medical officers. Dr. Hearne, who has all along most warmly advocated some of the necessary reforms, has boldly offered himself as a candidate. This fact we learn from the advertising columns of a Southampton paper. Far removed as we are from the scene of the controversy, we are perhaps the more able to impartially urge conciliatory councils. The Governors of the Infirmary must be well aware of the ability of their townsman, and in a case like this surely they will forget the warmth of the late debate, and proceed to vote as conscience suggests for the good of the sick poor committed to their charge. Dr. Hearne was House-Surgeon under the late Liston at University College Hospital, where he gained the Gold Medal in Surgery, and took honours in Medicine, Materia Medica, Physiology, Chemistry, and Comparative Anatomy. He took the College and Hall diplomas in 1842-3, graduated M.B. at the London University in 1844, and took the Fellowship of the College of Surgeons in 1858. We do not know who may venture to oppose him, but certainly, apart from his large experience since his settlement at Southampton, he possesses credentials which are not

always found in candidates for appointments in provincial infirmaries. His election would prove the desire of the Governors to act justly by the charity, and be a guarrantee to the profession at large that the reforms long declared essential should at least have fair consideration. The address issued by Dr. Hearne is such a model of independence and manly bearing that we extract it from the advertisement :—

"TO THE GOVERNORS OF THE ROYAL SOUTH HANTS INFIRMARY.

"MY LORDS, LADIES, AND GENTLEMEN—The Resignation of Mr. SAMPSON having created a vacancy in the office of Surgeon to your Institution, I tender my services with the view of testing whether you really seek the welfare of the poor by manifesting a desire to secure for them the aid of a Surgeon of experience—so much needed in the at present unfortunate position of the charity.

"Having waited with the hope that other experienced Surgeons would offer themselves for the post, I now take this step in consequence of having heard from influential governors that the absence of candidates precludes the possibility of their even expressing an opinion on the eligibility of the one selected by the dominant clique.—I am, my Lords, Ladies, and Gentlemen, yours obediently."

THE PATHOLOGY OF TUBERCLE.

SOME important investigations into tuberculosis have recently been made, to which we are desirous of directing attention. The interest that attaches to the subject is well illustrated by the courses of lectures at the London College of Physicians, of which we have given very accurate abstracts.

Dr. Reginald Southey selected as the subject of his Gulstonian Lectures, "The Nature and Affinities of Tubercle," while Dr. Andrew Clark devoted the Croonian Lectures, which immediately succeeded, to a consideration of the "States of Lung commonly comprehended by the term Pulmonary Phthisis." The two subjects, although distinct, are obviously closely connected, and lead to certain points common to the two, as will be seen from a perusal of the abstracts that have appeared in the last few numbers of the MEDICAL PRESS AND CIRCULAR.

Another indication of the zeal with which this subject is studied, will be found in a communication made by Mr. Simon to the Pathological Society last week. It appears that Mr. Simon has been recently carrying on some experiments respecting the possibility of inoculating tubercle, and specimens of deposit were shown, possessing, to the naked eye, the appearances of tubercular matter, which had been produced by inoculation in rabbits.

Those who had the pleasure of hearing the Croonian lectures at the College of Physicians will not soon forget Dr. Clark's account of his own experiments on rabbits, nor the very careful manner in which he guarded against too hasty inferences. It was therefore fortunate that he should have been present at the Pathological Society when Mr. Simon related his own valuable researches, and we append his remarks on the subject here, furnishing, as they do, an excellent addendum to his Croonian lectures, concluded in our last.:—

"Dr. Andrew Clark having repeated M. Villemin's experiments at the time of their publication, and referred to them in his lectures at the College of Physicians last year, and having, moreover, some years before, with the assistance of Mr. Little and others, tried various experiments for the induction of phthisis, begged permission to offer a few remarks on the very interesting communication of the President.

"When pieces of fresh grey tubercle were introduced into a subcutaneous wound in the neck of the rabbit, a hard swelling or imperfect abscess formed at the spot in a few days, and in the course of two or three weeks, or even less, grey tubercles were formed in the lungs, and a little later in other parts of the body. These tubercles had all the naked eye characters of the grey granulation in man, and so far, he could testify from repeated trials, that the experiments were conclusive. But the conclusions that the tubercles artificially induced were identical in nature with the grey granulation of man, and capable of indefinite propagation by inoculation, were to be received with the greatest reserve. For, in the first place, the grey tubercle artificially induced in the rabbit was essentially cellular in structure, whilst the ordinary grey granulation of man was essentially nuclear or corpuscular; secondly, the grey granulation of the rabbit was frequently absorbed; and thirdly, it never appeared to give rise to those secondary changes—pneumonia, fibrous degeneration, fatty usure, and emphysema—invariably induced, sooner or latter, by the grey granulation in the lung of man. Lastly, *Dr. Clark had succeeded in two instances in producing grey tubercle by the insertion of non-tubercular matter into the neck of the rabbit.*

"Now, the experiments of the President differed from those of other experimenters in some points of cardinal importance worthy of the closest examination. (1.) He made a slight wound. (2.) He used *yellow*, not grey tubercle; and (3.) instead of inserting little bits of tubercle he used only rather more of the matter of tubercle than he would have done of lymph if he had been practising vaccination. The experiments, moreover, differed in one at least of their results. In the President's cases no swelling or abscesses arose in the inoculated spot, one or other of which events had always happened in the hands of other experimenters. The President's experiments had been followed by the appearance of tubercle in the lungs and other organs; but, as Dr. Clark had not seen the specimens, and as there existed the loosest notions as to what was, and what was not tubercle, he reserved his judgment upon this important point.

"Dr. Clark, in conclusion, called the particular attention of the Society to the matter used for inoculation. When grey tubercle was used one might form a sufficiently (but not quite) accurate notion of the uniform character of the inoculating material; but when, as in the President's cases, *yellow tubercle* was used, one could not form, without further explanation, any just idea of what was meant by that term. For it was demonstrable that the yellow deposits in the lung indifferently called "yellow tubercle," were very various in their nature, and in the majority of instances quite unconnected with the true grey granulation. Such so-called yellow tubercles might be the cheesy transformation of inspissated pus, unabsorbed pneumonic deposits, syphilitic nodes, hæmorrhagic extravasations, embolisms, and the like. If a pneumonic deposit under the name of yellow tubercle could produce grey granulations, plainly the whole complexion of the case was changed. Again, if the insertion of pieces of tubercle into the neck of the rabbit was essential to the production of the grey granulation, the experiment was not a mere affair of inoculation but of something else, of which he had spoken elsewhere. Lastly, if tubercle was inoculable in the sense that the syphilitic or vaccine virus was, tubercle would be more hereditary than it was; more communicable by husband to wife, and more common than happily it is among men engaged in the study of the pathological anatomy of phthisis."

SURGICAL SOCIETY OF IRELAND.

FRIDAY EVENING, MARCH 15, 1867.

Dr. BUTCHER, President of the College, in the Chair.

SYMES' AMPUTATION OF THE FOOT.

By EDWARD HAMILTON.

THE details of a case in which Symes' amputation of the foot was recently performed, may not be uninteresting to the members of the Society.

A boy, aged 18, was admitted to Steevens' Hospital on 29th of last December, suffering from excessive disease of both feet. They presented considerable deformity, as may be seen in this, the right foot traversed by numerous sinuses, with bone pro-

truding at several points. He states, that when a child, he hurt his feet while running along a ladder placed on the ground, and that they have continued sore ever since. The right foot could not be put to the ground, the least pressure or movement causing excruciating pain; he can support his weight with the left foot. This boy presented a most wretched appearance; he was emaciated, with that waxy complexion which indicates prolonged organic disease and an impoverished condition of the blood; he had slight sweats; his pulse was weak; and his heart's action very feeble; his chest and abdomen were carefully examined, but presented no evidence of phthisis or mesenteric disease. The question as to the propriety of amputation was thus a most delicate and anxious one, and it was determined, in consultation with my colleagues, to try if any improvement in his general health could be effected before anything in the way of operation was undertaken; accordingly, he was placed on nutritious regimen, with wine and the syrup of the phosphate of iron. Under this treatment he quickly improved, so that the operation was performed on the 10th of February. There was nothing in its details worth recording; the ordinary knife for excision was employed, respecting which I would caution my professional brethren against its being spoiled by the cutter, who sometimes continues its cutting edge round the extremity, which should be left perfectly blunt. You are thus enabled to push the soft parts from the bone without risk of transfixing and making button-holes in the flap. On sawing off the ends of the malleoli and the articular surface of the tibia the bone was found very soft and apparently diseased. This was gouged away to a considerable depth, and its appearance seemed to augur a very doubtful prognosis as to the result of the case, and caused us to watch with some anxiety for rigors or the blush on the cheek which so truly indicates the advent of osteomyelitis—fortunately such did not occur, and his progress was most satisfactory until the fifth day, when I was hastily summoned to see him at night, hæmorrhage having set in. On arriving at the hospital Dr. Symes, who was on the spot, had completely commanded bleeding by a tourniquet, and exposing the stump to the air. It was caused by the patient suddenly shifting his position in bed. From this, his recovery has been most rapid, and he now bears the firmest pressure on the stump without pain.

This is the fifth case in which Symes' operation has come under our notice within a limited period. Three of these have been recorded by my lamented colleague Dr. Symes, and I will now exhibit to the Society a patient on whom I operated eight months ago, who carries on his trade as a carpenter, without the least inconvenience; in all, the result has been most perfect success. They were all cases of prolonged disease, for which the operation is far more suited than for primary cases of accident. The integument on each side of the normal foot is too thin to make a good flap, and is consequently apt to slough, a result which I have never seen follow where the parts have become thickened by infiltration and hyperæmia from long-existing determination. In cases of long-continued disease where the parts had been thickened, and to some extent infiltrated, they could make a large and good flap to support the ends of the bones.

Dr. Fleming said that the boy had been under his care in the Richmond Hospital for some time previous to his admission into Steevens' Hospital. He left the hospital of his own accord. During his stay in it he was extremely delicate, and in addition to the symptoms mentioned by Mr. Hamilton, a considerable amount of fever existed, and also bronchitis, which was then very prevalent. It was not easy to decide as to the absolute state of the lungs, or their perfect freedom from threatened symptoms of phthisis; and there was another reason for doubt as to the propriety of any operative proceeding—namely, considerable enlargement of the glands—not of the groin only, which he should not so much mind, but also of those in the neck and in the axilla. These had subsided before he entered Steevens' Hospital, and under the treatment there, his health very much improved. He thought the case was particularly instructive. Mr. Hamilton had said that there was not one of the bones of the tarsus free from disease, even the astragalus was diseased, the cartilage opposed to that of the tibia being so thin that it might be said not to exist. The cartilage of the articulating end of the tibia was not so much affected. Its cancellated structure was found to be soft and filled with tubercular deposit; this was scooped out at the time, and merely a shell of the compact substance of the tibia left, yet the reparative process had advanced so far that this boy could bear a large amount of pressure on the surface of the stump, as he had personally tested. This, in addition to the healing of the wound, proved that the curative processes underneath were progressing satisfactorily, and, moreover, without any apparent trace of periostitis.

The President observed that the points on which Mr. Hamilton had laid stress were worth consideration. He determined on this operation because the foot was destroyed, and he wished to save as much of the limb as he could, merely taking away the foot and the diseased extremity of the tibia. On removing the end of the tibia, he found the cancellated structure was carious, and he accordingly scooped out the diseased substance and turned up the flap over the bones. They often found in excision of the knee or elbow-joint that the texture of the bone was diseased as in this case. The proper course was to gouge out the diseased structure, as had been done by Mr. Hamilton. It was only a confirmation of a great fact which should never be forgotten.

FOREIGN BODIES IN THE URETHRA.

Dr. Fleming exhibited a portion of a thorn twig, and one of a grass stem, each at least seven inches in length, and about the calibre of a No. 2 or 3 catheter, which had been introduced into the urethra to relieve retention of urine by men labouring under chronic stricture. In the attempts to remove them, the portions caught, broke off, and on reaching the hospital the proximal extremities of the foreign bodies were found to be at a considerable distance from the orifice of the urethra, and decidedly beyond the scrotal portion of it. With the use of a forceps which was exhibited to the Society, those foreign bodies were removed without any difficulty.

This forceps resembled that delineated in Mr. Thompson's work on lithotrity and lithotomy.

Dr. Fleming likewise exhibited other forceps which he had devised for a similar purpose.

URINARY CALCULI.—LITHOTOMY.

Dr. Fleming also exhibited three specimens of urinary calculi of considerable size, which he had lately removed by lithotomy from children, aged respectively 12, 5, and 3 years. He detailed the most remarkable features of each case.

Dr. Persse White wished to have an expression of opinion from the Society on a case which had come under his notice. A boy was brought to him 6 years ago, and on making an examination he found that he had stone in the bladder. Not being inclined to operate himself, he sent the boy to Dublin, under the care of a distinguished hospital surgeon now dead. He was present at the operation, which was as skilfully performed as it was possible for it to have been. The calculus was of considerable size. He had an opportunity of watching the boy ever since. He suffered from stillicidium of urine. He was a healthy boy, and of peculiarly healthy family, was five years old at the time of the operation, and was now eleven, and there was a constant dribbling of urine, his clothes were wetted thereby, and he was in a wretched state ever since the operation. He mentioned the case as one of those unfortunate accidents that might follow the most skilful operation.

The President referring to the size of the stone mentioned the following case which had come under his notice. Some four or five years ago a boy was brought over here from Holyhead. He had been the subject of stone for six or seven years. He was then nine years old. So excruciating were his sufferings, that he was kept constantly in bed, with a large bolster under his hips, which had the effect of throwing back the stone from the sensitive neck of the bladder. From the position in which the boy was kept so long, his knee-joints were stiffened, and he was crippled. There was even found considerable difficulty in placing him on the operation table in a proper position. However, he was placed under the influence of chloroform, and a very large stone was extracted. He recovered, and at the end of seven or eight weeks they were enabled to straighten his limbs, and he went away perfectly well, and remained so. With respect to the case referred to by Dr. White, they might be certain the operation was well performed, notwithstanding the occurrence of stillicidium. He had seen that occur where the stone was large, and the neck of the bladder lacerated extensively in its extraction. If much force were used in drawing the stone through a small opening, weeping from the bladder would probably occur afterwards. In fact he did not think it could be said beforehand, where the stone was very large, that that condition would not occur. He had seen it occur under the best operations. In the case of children of tender age the traction should be most gentle, so as not to lacerate the urethra which was then so weak that it could be easily injured.

Dr. Fleming observed that he had known incontinence of urine to occur after lithotomy in not a few cases where the operations were performed by the most eminent surgeons. This was of more frequent occurrence than many would suppose. He knew more than one person who had been operated on for stone, and who suffered from occasional stillicidium. One was rendered most uncomfortable by it, for if he went into society, slight excitement caused the urine suddenly to escape.

Mr. Barton asked was there any circumstance in these cases to give Dr. Fleming an idea of the cause of the incontinence of urine.

Dr. Fleming said he was not acquainted with the details of the cases. He only knew what had been the result after the operations.

BAYONET WOUND OF ABDOMEN.

Dr. Persse White said—Mr. President, the pathological specimen which, by the kind permission of Mr. Macnamara, I have the honour of laying before you this evening, was taken from the body of a Fenian who was stabbed by a policeman on the Tallaght-road, about one o'clock on the morning of Wednesday, March 6th; he was a fine well-made man of twenty-six years of age. At about fifteen minutes to nine on that morning, I was called on by a policeman to visit the wounded man. I found him in the waiting room of the Roundtown Dispensary lying on his back on the floor, he was quite composed and sensible; complained of some pain in the epigastrium, but none elsewhere. On removing a coarse cloth which covered the abdomen, I found an enormous mass of intestine protruding from a small wound of not more than three-fourths of an inch in length, and situated in the lower part of the abdomen about three inches below the umbilicus, and two inches from the median line, its long axis being nearly horizontal; it was clearly the wound of a semi-sharpened sword.

The protruded intestines were covered with chaff, oats, &c., and were in a state of intense inflammation, covered with lymph, and exuding bloody serum, in fact, a case of active peritonitis external to the body; there was not a sign of hemorrhage; he stated that he had walked fully a mile after receiving the wound, holding the protruded intestines in his hand.

I had him at once removed to a warm room, for the cold air gave him great pain when the intestines were uncovered, and first cleaning them with warm water, attempted to return them; this I found to be impossible, for they were much distended, and the wound so small. I then put him under the influence of chloroform; enlarged the wound to about twice its original size, and returned the intestine bit by bit, using no violence or force of any kind (my friend Dr. Davy kindly came to my aid and attended to the administration of the chloroform for me). I then closed the wound with thin points of wire suture, put on a large pad and bandage, and gave him a full opiate and some wine. The police then had him removed to the Meath Hospital. At one o'clock I saw him with Mr. Macnamara, under whose care he was placed, he was then semi-collapsed, but apparently doing as well as possible, he was put under the usual opium treatment.

Mr. Macnamara saw him at half-past five P.M., when he was doing well; beginning to rally from collapse; and at ten P.M., when visited by Mr. Russell, the resident pupil, he was apparently better; had conversed with those about him and taken some nourishment; a few minutes afterwards he died.

I was not present when the post-mortem was made by my friend Dr. Foot, but the parts here exhibited, show the amount of injury done internally; the intestine and mesentery are perforated in no less than six places, yet Mr. Foot has told me, that there was no hemorrhage, or no extravasation of the contents of the bowels, but that there was some slight extravasation along the spine beneath the peritoneum; the wounded portion of intestine was not much inflamed, but the portion which had been protruded was already glued together by adhesive inflammation.

PROPOSED MEMORIAL TO PROFESSOR GOODSIR.

(From the Edinburgh Evening Courant, March 21st, 1867.)

A meeting was held in the hall of the Royal College of Surgeons yesterday afternoon, to take steps for commemorating the services rendered to the cause of medical science by the late Professor Goodsir. Among the gentlemen present were—Principal Sir David Brewster, Dr. Christison, Dr. Maclagan, Dr. Lyon Playfair, C.B.; Dr. Smith, P.R.C.P.E.; Mr. David Smith, F.R.S.E.; Mr. John Muir, LL.D.; Professor Blackie, Drs. Andrew Wood, Begbie, Littlejohn, Benjamin Bell, Seller, Saunders, Ormond, Handyside, Gairdner, Matthews Duncan, Combe, Moir, Dyeer, Menzies, Burn, Scott, Balfour, Crum Brown, Lowe, Millar, Hardie, Joseph Bell, Gamgee, T. G. Balfour, Turner, &c.

On the motion of Sir David Brewster, Dr. Dunsmure, President of the Royal College of Surgeons, was called to the chair.

The Chairman remarked that the scientific eminence and personal qualities of the late Professor Goodsir had not only secured for him a world-wide reputation, but had endeared him to all who knew him, or who had come in contact with him. He thought that there could be no difference of opinion as to the propriety of taking some steps for instituting a tribute to the memory of one so much appreciated and esteemed.

Dr. Smith, President to the Royal College of Physicians, moved—"That this meeting, deploring the loss which science has sustained by the death of Professor Goodsir, resolves that steps be taken to form a lasting memorial of his distinguished career as an original investigator and teacher of anatomy and physiology." He said he had much pleasure in moving the first resolution. But before doing so, he would beg to express in a few words his hearty agreement with the object of the meeting. The name and the fame of Professor Goodsir had done much to sustain and advance the high position of the University and the medical school. He therefore thought they were called upon to do something to mark their high estimation of those great talents and original cast of mind which characterised him, and enabled him, both as an investigator and a teacher, to do so much for his favourite science, anatomy, as well as to diffuse a knowledge and a love for it among the numerous pupils who flocked from all quarters to hear him. It had been remarked that he had left few writings behind him on his favourite science; but when they took into consideration the infirm state of his health during a long period of his professional life, it would not surprise them that he did not write more, but that he was able to accomplish what he did, both in writing and teaching. Nothing but an enthusiastic love of his science, and his great interest in his pupils, could have enabled him to go through the laborious duties of his chair. The sympathy which existed between him and them, and the enthusiasm with which he inspired them, were remarkable; so that his love for the science of anatomy and his original views would, he had no doubt, be deeply impressed upon many of them, from which they might expect the happiest results.

Professor Christison seconded the motion. He said he was thoroughly convinced that a movement to perpetuate the memory of Professor Goodsir in some way or other would be most successful, from the number of his pupils that existed throughout the world. He had made a calculation, and had come to the conclusion that upwards of 4000 gentlemen had attended the instructions of Professor Goodsir; and when he thought how much esteemed he was by those pupils, he had little doubt that the present movement would meet with great success.

The resolution was unanimously agreed to.

Mr. David Smith, Treas. R.S.E., moved the second resolution, which was as follows:—"That the most appropriate manner of commemorating Professor Goodsir's services as an investigator and teacher is the establishment in the University of Edinburgh of a Fellowship in Anatomy and Physiology, to be called the 'Goodsir Fellowship.'" He cordially agreed in all that had been said with regard to the estimable character of the late Professor Goodsir. He might require to make some apology for taking part in the proceedings of the meeting, consisting, as it did, chiefly of medical men; but the ground on which he thought his appearance there was justified, was that the establishment of an adequate memorial to a man of such eminence as Professor Goodsir should not be confined to the profession to which he belonged, but should be shared in by the scientific world and the general public who had been largely benefited by his contributions to science. The resolution contained three propositions. The first was that the establishment of a Fellowship was a more appropriate manner of commemorating the services of a man of such eminence as Professor Goodsir than any monument of stone or lime, however enduring. The second proposition was that the Fellowship was to be one in anatomy and physiology, and would be a means of enabling young men who had shown an aptitude for these sciences to devote a portion of their time to it, which

otherwise they would have been compelled to relinquish in order to engage in the practice of their profession. He believed that if Professor Goodsir could have been present and spoken, he would have felt there was nothing more gratifying to his own feelings than that his name should be associated with a movement calculated to advance the science which he so ardently loved and so successfully cultivated. Upon the third point he need say nothing, as all present would cordially agree that the proposed Fellowship should bear the name of Professor Goodsir.

Dr. Matthews Duncan seconded the resolution ; and expressed his belief that they would be able, in the manner contemplated in the resolution, to bring out the latent genius of young men, who, after prosecuting their studies by the aid of this Fellowship, might be able to advance the sciences of anatomy and physiology, and thus reflect lustre upon the school of medicine in Edinburgh.

Dr. Begbie moved—"That the following gentlemen be appointed a committee, with power to add to their number, to collect subscriptions for the above purposes, to frame regulations for the Fellowship, and to report to a future meeting of subscribers:—Sir David Brewster, Dr. Christison, Dr. Smith, Dr. Bürt, Dr. Dunsmure, Mr. Syme, Dr. Andrew Wood, Sir James Y. Simpson, Bart., Dr. Saunders, Dr. Handyside, Dr. Maclagan, Dr. Matthews Duncan, Dr. Joseph Bell, Dr. John Muir, LL.D., Dr. Craig Maclagan, and Mr. David Smith—Dr. Craig Maclagan, F.R.C.P.E., to act, as honorary secretary." Dr. Begbie stated that the committee he had named was formed of gentlemen connected with the University, College of Physicians, and College of Surgeons, to form the nucleus of a large committee to carry out the objects of the meeting.

Dr. Lyon Playfair pointed to the importance of that clause in the resolution which gave the committee power to add to their number, as it would enable them to add members who had received benefits from the late Professor in all parts of the world.

Dr. John Muir, LL.D., in seconding the resolution, said that he was very sanguine of the success of this movement, considering the reputation of Professor Goodsir and the object which the meeting had in view. He spoke upon practical as well as theoretical grounds. His friend Dr. Charles Murchison, in London, by his activity had succeeded in collecting a considerable sum of money, out of which there was to be created a Fellowship in natural science in the University in commemoration of the late Dr. Hugh Falconer, of the Bombay service. When he considered that Dr. Falconer was only known as a man of science, and had never been a teacher, and having heard the statement as to the number of gentlemen who had received instruction from Professor Goodsir, he could have no doubt but that the movement would be eminently successful.

Professor Maclagan moved a vote of thanks to Dr. Dunsmure for presiding, and to the College of Surgeons for the use of their hall.

The meeting then separated.

THIRD REPORT
ON THE PROGRESS OF PHARMACY,

SUBMITTED TO THE BRANCH MEDICAL COUNCIL (IRELAND),

By WM. DANIEL MOORE, M.D., Dub. et Cantab., M.R.I.A.;

EXAMINER IN MATERIA MEDICA, PHARMACY, AND MEDICAL JURISPRUDENCE, IN THE QUEEN'S UNIVERSITY OF IRELAND.

In continuation of the discharge of his duty as Reporter on the Progress of Pharmacy to the Branch Medical Council (Ireland), Dr. Moore has submitted to the Branch Council the following summary of papers in the several foreign journals named in his second Report.

ACCELERATING THE PROCESS OF FILTRATION.

In the *Journal de Pharmacie et de Chimie* for May, 1866, p. 355, M. Picard proposes a mode of *accelerating the process of filtration*, which may be thus stated:—A paper filter, without folds, adapting itself exactly to the walls of a conical glass funnel, is introduced into the latter; the paper is moistened with the finger, care being taken to remove any bubbles of air which may remain between the paper and the glass. By means of an Indian rubber tube, the lower part of the funnel is made to communicate with a glass tube, about forty inches in length, narrow enough to prevent the column of liquid dividing in it, and bent circularly at the upper part, near the Indian rubber tube.

The whole is placed in a vertical position, and the fluid to be filtered is carefully poured into the funnel. The first portions of the filtered liquid collect in the curve of the long tube, which serves to maintain a constant column of liquid, and causes the latter to act as an exhauster, so soon as the fluid begins to descend in the rectilineal part of the tube.

It is said that in this way filtration is accomplished ten or twelve times more quickly than by the ordinary method.

In the number of the same Journal for December, 1865, p. 425, is a useful paper, by M. Guibourt, on the *medicinal weights* of Europe, compared with the metrical system. Having given a Table in which the different weights of the several countries are reduced to their value in grammes, and having added remarks upon many of them, the author devotes a large portion of his essay to the consideration of the weights and measures made use of by the pharmaciens of England. He gives an example of the mistakes caused by the complication of weights and measures:—"In the French edition of the London Pharmacopœia, published in 1837, the wine pint of 0·473 litre or 473 grammes of distilled water has been taken as the basis of comparison with the French weights, instead of the imperial pint of 0·566 litre. The result is, that, dividing 473 grammes by 20, this work has given, as the weight of the fluid ounce, 23·6 grammes; as that of the fluid drachm, 2·957; and for the minim, 0·040 gramme, which a typographical error has made 0·40 gramme. It is easy to imagine," adds M. Guibourt, "what lamentable errors may have been the consequence of this publication."

The author proceeds to criticise the abolition for weights—not for measures—of the drachm and scruple by the framers of the British Pharmacopœia, and advocates the use of the balance in determining the quantity of a fluid, expressing his approval of the later Prussian Pharmacopœias, which admit no measure for liquids; and of the Bavarian Pharmacopœia, which allows only fluids of slight activity, prescribed by ounces, to be measured. He also advocates strongly the adoption of the metrical system; but I cannot see that any advantage would be gained by the adoption of the plan of weighing fluids, and there is no doubt that such a method would certainly be attended with great additional trouble and inconvenience.

The same number of the Journal has, at page 408, an article by M. Müller, on the preparation of *Phenic* or *Carbolic Acid* of which publication I have given a translation in The Medical Press and Circular, 1865, p. 505.

The number for July, 1866, pp. 48, 49, has papers, by M. Perret, on the manufacture of *Citric Acid*, and of the *Citrate of Magnesia*.

PICRIC ACID AS A TEST OF PRUSSIC ACID.

In Buchner's *Neues Repertorium fur Pharmacie*, Band xiv., 1865, p. 545, Professor A. Vogel recommends *Picric Acid* as a very sensitive test of the presence of Prussic Acid. If a moderately concentrated solution of Cyanide of Potassium be mixed with a watery solution of Picric Acid, a deep dark-red colour ensues upon the application of heat, and after a few minutes increases considerably in intensity. The author found this reaction to be still perfectly distinct when Prussic Acid was diluted with 30,000 parts of water. If the dilution be very considerable, the coloration is not remarkable until the fluid has been boiled for a long time, and subsequently allowed to stand.

The author remarks that Picric Acid is peculiarly adapted for demonstrating in a simple manner the Prussic Acid known always to occur in tobacco smoke. The smoke is led by means of an exhauster into a solution of caustic potash ; the latter is diluted, mixed with Picric Acid, and boiled, whereupon the characteristic coloration immediately occurs.

ACONITIA.

In the number of the *Journal de Pharmacie et de Chimie* for February, 1866, p. 113, is a translation from the *Chemical News*, 1863, vol. ix., p. 87, of Mr. Proctor's remarks upon the comparative richness in *Aconitia* of the roots of European and American Aconite. Mr. Proctor obtained from 1000 parts of American root of Aconitum Napellus 4·2 of nearly pure Aconitia, while the European roots furnished only 2 parts per 1000.

AMMONIACUM.

Dr. August Vogl, of Vienna, publishes, in Buchner's *Repertorium*, 1866, No. 2, p. 73, some notes upon the source of *Ammoniacum*. This gum resin is, he says, at least in greatest part, not a product of a specific secretion, but of the disorganization of vegetable cells—an observation nearly identical with that made by Wigand (Pringsheim's *Jahrb.* III., 1863, pp. 146, 147), respecting Ammoniacum, Assafœtida, and Opoponax.

BITTER PRINCIPLE OF BITTER ORANGE PEEL.

M. Blottière pharmacien, publishes in the *Bullctin général de Therapeutique*, 1865, tome 69, p. 549, some researches on the *bitter principle of bitter orange peel.* He prepares a watery extract of the rind, from which he takes up the bitter principle by alcohol, leaving inert and fermentible mucilaginous matter, which, he says, constitutes nearly one-third of the original watery extract, and with this alcoholic product he proposes to prepare a syrup more uniform and stable than that of the French codex. It seems to me that the framers of the British Pharmacopœia, by directing the syrup to be prepared with the tincture, have accomplished the same object in a simpler and easier mode.

COLCHICIN.

The number of the *Journal de Pharmacie et de Chimie* for December, 1865, at page 490, contains an abstract of two papers, by Messrs. Ludwig and Hubler, upon *Colchicin*, the originals of which appeared in the *Archiv der Pharmacie*, Band cxi. pp. 10, 194. M. Ludwig prepares this principle by exhausting colchicum seeds with hot alcohol, adding to the liquid about twenty times its volume of water, which separates an oily matter, treating with basic acetate of lead, to eliminate the colouring matter, and then with phosphate of soda to separate the excess of lead; lastly, he adds tannin which precipitates the colchicin.

To isolate the colchicin, the precipitate, consisting of three equivalents of this principle and two of tannin, is pounded with an excess of washed and moistened litharge; the mass is then dried in a water bath, with agitation. To ascertain that the tannin is fixed, a small portion is boiled with alcohol; the filtered fluid ought not to turn blue on the addition of sesquichloride of iron. If it should do so, the mass must be again mixed with water, and dried in the water bath.

The colchicin is separated by means of boiling alcohol; it is dried *in vacuo*, over sulphuric acid. By repeating these operations, the principle is obtained in a state of purity.

As M. Oberlin has shown, it is incorrect to class colchicin among the alkaloids. It is indifferent with respect to acids, and if it forms with these a crystallizable compound, the latter includes absolutely only the elements of colchicin.

SOLIDIFICATION OF BALSAM OF COPAIVA.

M. Rabot suggests, *Journal de Pharmacie et de Chimie*, 1865, p. 445, a modification of the plan proposed by M. Roussin for the *solidification of Balsam of Copaiva*, and described in my second Report, the object of the modification being to effect the *instantaneous* solidification of the balsam. Pure balsam of Copaiva is mixed in a capsule with one-sixteenth of its weight of calcined magnesia, slightly hydrated by the aspersion of a few drops of water (about one-tenth of the weight of the magnesia). The capsule is then plunged into boiling water, and the mixture is shaken, being, at the same time, held for some minutes in the water bath. The author adds, that the process is equally applicable to *turpentine*, and that by its means both medicines may be advantageously prescribed in the solid form, without the loss of any of their properties.

CURARE.

The same Journal has, at page 296, a paper by M. W. Preyer, on the active principle of *Curare*; and in the *Bulletin general de Therapeutique*, Oct. 15, 1865, p. 294, may be found a paper, by Dr. Jousset, on curare in a therapeutical point of view.

In the latter Journal, for 30th March, 1866, p. 241, is a paper by M. Gallard, on the employment of large doses of *Digitalis* in the treatment of pneumonia.

M. Carlo Parvesi proposes *(Journal de Pharmacie et de Chimie*, January, 1866, p. 49*)* to preserve protiodide and protosulphate of iron by enveloping them with a very dense solution of gum arabic, which is subsequently dried in a heated stove.

LEECHES.

In the number of the same Journal for February, 1866, p. 128, M. Lahache proposes to preserve *leeches* in water containing a quantity of *Fucus crispus* (Carragheen). The vessels are placed in a situation where the temperature varies between 68° and 77° F., and the water is renewed only once a day. The author supposes that the leeches find nourishment in the mucilage formed by gradual solution of the fronds.

In the *Bulletin general de Therapeutique* for 15th April, 1866, p. 308, M. Stanislas Martin objects to the foregoing plan, on the ground that notwithstanding all care to change the water frequently, it alters rapidly; and that, if the leeches are fed, they will be less likely to take when required. M. Martin advises instead, to cover the bottom of the vessel with a bed of flints of various shapes, and of a size not exceeding that of a hazel-nut. The leeches love to sojourn in the cavities formed by the flints, and in entering them rub against the asperities of the stones, so getting rid of the filamentous mucosities which embarrass them.

(To be continued.)

Correspondence.

QUACK ADVERTISERS.

TO THE EDITOR OF THE MEDICAL PRESS AND CIRCULAR.

Sir,—It was not my wish to trouble you with further correspondence, but I am obliged to reply to some editorial remarks appended to my letter of 11th inst., which appeared in last week's issue of The Medical Press and Circular. I shall not add anything to what I have said as to a publisher's duty in reference to "quack" advertisements, but I wish to state, with respect to your comments, that if I am the vendor of any of the so-called nostrums to which you object, I am not aware of it, and shall be glad to know what they are? I am a wholesale drug merchant, doing almost nothing in the retail way, and only keep in stock such patent articles as are in general demand by the retail chemists and druggists; and, I believe, that I do not keep any articles that may not be had from all the first wholesale drug merchants in this city. You may know more of these medicines than I do, but if I were not to keep them in stock for my wholesale customers, I might in fact go out of the business altogether. Many of these patent medicines are old established remedies that have been advertised into notoriety, and a demand thus created for them. They may be of much value or little; but that is a matter which must be left to the public, and the latter insists on having what it wants, and will accept nothing else. With regard to the "promulgators" of the nostrums in question, I do not possess one scintilla of information over or above what you possess yourself, having no *direct* business communication with any of them; but, I am aware, that in advertising matters they pay their way as other men of business do, and leave no ground for complaint on that head. This is all I know of these parties, of their private character I know nothing one way or other, and of their professional status, or want of it, I am equally ignorant. I advert to these matters purely in self defence; because, in your editorial comment, it is insinuated indirectly that I am "hand and glove" with the quack doctors, whereas in truth I have never seen or corresponded with one in all my life.—Yours truly, Thomas Hackett.

P.S.—I may remark that the advertisements to which you object sometimes find their way into strange quarters. It is not long since a certain Dr. Napier advertised a notorious "Quack" Essay in your own columns, and I can testify that it appeared weekly for several months therein. T. H.

[We have no reason to believe that the book alluded to as having been advertised in our columns deserves the name of a "Quack Essay." We have not seen the book. We don't know who Dr. Napier may be. The advertisement came to us through a respectable house, and did not contain any appearance of quackery.—Ed. M. P. & C.]

THE FUNCTION OF ELECTRICITY IN THE ANIMAL ECONOMY.

TO THE EDITOR OF THE MEDICAL PRESS AND CIRCULAR.

Dear Sir,—It is really wonderful how far men have pursued in times gone by their ridiculous theories and absurd opinions with regard to medicine and medical science, and it would seem that the time for men of coining new and ludicrous theories has not yet come to a close.

Dr. Caplin, apparently not being satisfied with the numerous theories which have been from time to time promulgated, with regard to what life is, or the vital force, whatever that may be, which presides over the processes of living beings, has hit upon a new idea, or at least has attributed more to electricity than has hitherto been generally accorded to it by others, and has, by so doing, added another chemra to the already too voluminous list of fanciful speculations. He would, it seems to me, be inclined to put electricity in the place of what Hunter called the "materia vital," or Muller the "organic force," and

refer to it as a cause of all the numberless, varied, and complicated processes which take place in the organism, whether it be that of excretion, secretion, or locomotion, as invariable effects.

Dr. Caplin looks upon the human body as a "decomposing machine," in which electricity is the sole and only cause of the innumerable processes which take place therein. True it is, that he admits, to my mind somewhat reluctantly, that it is sometimes an effect; would it not be more consistent with what is known of the nature of electricity, and of the animal body, to regard the development of electricity as always and invariably an effect of the natural processes which are constantly going on during life?

I think nothing can be more absurd than likening the body to a steam engine, the stomach to a boiler, wherein the steam is generated which sets the human machinery agoing, and also the sweeping assertion that makes electricity a *sine qua non* in the developmental, nutritive, and generative processes.

It is a pity that the time and energy of an eminent man should be prostituted for the furtherance of a wild fantasy, a mere theory, the trueness of which no one believes in, and the existence of which is only to be found in the fertile imagination of Dr. Caplin.—I remain, sincerely yours,

G. V. Thompson.

Medical News.

Complimentary Dinner.—The present and former pupils of Dr. Mapother intend entertaining him at dinner and presenting him with an address at the Gresham Hotel on Saturday next, the 6th of April, at half-past six o'clock, on the occasion of his elevation to the chair of Anatomy of Physiology in the College of Surgeons. Any gentlemen wishing to join in this movement will please communicate with G. A. Curran, Esq., Royal College of Surgeons

The Health of Liverpool.—Dr. Trench, the Liverpool medical officer of health, has prepared a very able and exhaustive report on the health of the town during the past year. That year was one of unusual trial and pressure. During the earlier part of the year typhus fever and lung diseases were very fatal, and ran up the number of deaths to much beyond the usual limit. But even this heavy mortality became insignificant compared with the frightful fatality of cholera and diarrhœa in the third quarter of the year. The total number of deaths during 1866 was 20,198, being at the rate of 41·7 per thousand for the whole borough. Speaking of the rise and progress of the outbreak, Dr. Trench says:—"The lines of the cholera rise and decadence—of its advance and retreat—are symmetrical, very similar, and almost uninterruptedly regular. The philosopher is able, from the known and determined quantities of force and attraction, to predicate the form of parabola which a projectile will assume; but neither physician nor statist can tell why cholera rose to a certain height and then, as seen in the diagram, returned to the plane by a route bearing to the axis of the cone or pyramid the same figure and equi-distance, and what is still more astonishing, occupying almost the same time in its descent as did the line of its elevation. The pestilence began as an epidemic in the first week of July, and took eight hebdomadal periods to reach its apogee, then declined in force, and within the same measurement of time had, by the 1st of November, reached the plane gradually to disappear. Its rise in the first eight weeks cost 759 lives, it then rested for a week at its apogee and accounted for 193 deaths; its descent in the second eight weeks cost 778 lives." Dr. Trench appears to regard the second outbreak as quite distinct from the cases of the *Helvetia;* and gives a startling account of what he deems to have been the real outbreak of the disease in the town:—"On Monday morning, the 2nd of July, information was received at my office from the Registrar of Exchange Ward that a death certified to be from "English cholera" had occurred on the evening of the 1st, at No. 2 Court, Bispham-street. The locality is one only too well known to the sanitary officers, being inhabited by the lowest of the Irish population, and situated in the worst part of what may be justly described as the chief fever district of the parish. The court itself contained three straight up and down houses, and an open midden. It was altogether so close, confined, and unfit for human habitation, that the grand jury had, in July, 1865, confirmed my presentment, and ordered the demolition of two of the houses and the conversion of the common cess-pool into a water-closet; and there only awaited some legal or other formalities to have the order carried into effect. The probability was only too evident that in a neighbourhood so squalid and overcrowded, and among a population so indigent and wretched, the spark, if of the true contagious cholera, would burst into a conflagration; therefore immediate efforts were made, both by the relieving officers and myself, to induce the friends of the deseased to consent to the speedy burial of the corpse. The family refused to listen to our counsels, and elected to keep the body until Tuesday, in order that it might be waked during the night watches of Monday. It was laid on a board on the floor of the lower or sitting apartment of the cottage, and in this room, where men and women eat, drank, and slept, the orgies of the coronach, embracing the co-operation of scores of people, were maintained, amidst drunken and profane ribaldry, during the day and night. When I again went on the Tuesday morning, to try either by threats or persuasions to hasten the funeral, I found the whole place reeking with tobacco smoke and with the loathsome and disgusting emanations of drunken unwashed bacchanals. The three houses were crammed with men, women, and children, while drunken women squatted thickly on the flags of the court before the open door of the crowded room where the corpse was laid. There had been, in the presence of death, one of those shameful carousals, which, to the disgrace of the enlightened progress and advanced civilization of the nineteenth century, still lingers as dregs of ancient manners among the funeral customs of the Irish peasantry. It was a rash challenge to the dreaded pestilence; and how and with what fearful results accepted, the mortality returns of the next four months will too clearly show. Suffice it now to mention that before the period of a week had passed, John Boyle, the husband of the woman, was also among the dead, and before the end of July forty-eight persons had died from cholera within the radius of 150 yards from the court which had been the scene of the ill-timed revelry.

Treatment of Patients in Colney-Hatch Lunatic Asylum.—At a late general meeting of the magistrates of the county of Middlesex, Mr. H. Pownall, who was in the chair, drew the attention of the court to a letter sent to the Commissioners of Lunacy, in which it was stated that a patient named Harrison had been put to bed in No. 5 room in D ward of Colney-Hatch Asylum in a state of nudity, without bedding of any kind; and that another patient, named Hobbs, was so treated for 140 nights during the winter of 1864 and 1865, and that he died one morning soon after being unlocked. The committee of visitors of the asylum, with a view to afford Dr. Sheppard an opportunity of refuting these charges, invited his attendance at a meeting of the board on the 18th ult. He at once admitted that the statements contained in the letter were substantially true, and that a similar mode of treatment was adopted as a system in cases wherein patients, by tearing and biting, habitually destroyed bedding and clothing, and even the lining of padded rooms. Harrison and Hobbs were patients of that character; they would in a short time after being placed in their rooms, and supplied with clothing and bedding, tear them to shreds, even the strongest dresses and quilted coverlets. The instructions to the attendants are to warn patients with such propensities that if they were found to have destroyed their clothing or bedding they would not be allowed any. Locked leather gloves had been found useless. As to the use of such gloves, when used they were not deemed to be or entered in the medical journal as mechanical restraint. Dr. Sheppard further stated that the medical books contained no record of the confinement of patients in a state of nudity, as above described. The practice now for the first time brought to the knowledge of the commissioners was in their judgment so much to be condemned, and affected so gravely the character of the asylum, that they suggested an immediate and full inquiry on the part of the committee. The commissioners add, that in all their experience they have met with no case of insane patients to which such treatment as that described could properly be applied, or would admit of any kind of justification. In a communication to the committee of visiting justices, Dr. Sheppard states that Hobbs was not placed in his room in the manner described for more than four nights out of sixty-seven, and that the statement that Harrison had been shut up in his room for ten successive nights without bedding or clothing was not true. This communication was transmitted to the Commissioners of Lunacy, who understand that the objections to the treatment in question are equally entertained by the commit-

tee, and that no recurrence of the practice will be permitted. Some discussion took place, and the report was put and agreed to.

BEQUESTS.—Mr. John D. Middleton, lately deceased, has bequeathed £200 to each of the undermentioned hospitals—viz., the Westminster, the Middlesex, the Charing Cross, and Convalescent Hospitals.

Notices to Correspondents.

All Contributions are attentively considered, and unaccepted MSS. are returned on receipt of stamps for postage; but the Editors cannot be responsible for any accidental loss, nor can MSS. or replies be delivered on personal application.

Contributions should be *legibly* written, and only on one side of the paper.

Dr. Andrew Clarke's Third Croonian Lecture is unavoidably postponed—the proof not being corrected in time for this issue.

Dr. Griffith shall have a private note.

Dr. Skilton, Monaghan.—To obtain registration under the Medical Act the applicant must forward his diplomas to the Medical Registrar for the Branch Council of the division of the United Kingdom to which he belongs. In Ireland, to Dr. Steele, at the office, Dawson-street, Dublin. The fee payable for practitioners qualified before 1858 is £2; for those qualified subsequently £5; for registration of any new diploma on the part of a practitioner already registered, 5s.

L.R.C.S.I.—The tendency to varicose veins will disqualify, as they interfere greatly with powers for long marching. There is a searching medical examination.

ERRATUM.

TO THE EDITOR OF THE MEDICAL PRESS AND CIRCULAR.

DEAR SIR,—Please correct an error which appears in my communication "On the Treatment of Delirium Tremens by Indian Hemp." Instead of "3ss.," 3ss. *of the tincture* was given every second hour.—By inserting this you will oblige, yours, very truly, HENRY BROWN.

TO THE EDITOR OF THE MEDICAL PRESS AND CIRCULAR.

MY DEAR SIR,—Your paper with Memorial to Lord Naas, March 13th, duly to hand. I write now to say that Dr. Tyrrell has handed me over £1 1s. for attendance and examination at the inquest.—Yours truly, R. P. BROWN M'CLELLAND.

TO THE EDITOR OF THE MEDICAL PRESS AND CIRCULAR.

SIR,—In your journal of March 27, "Inquisitor" asks the difference between a member and a licentiate of a college. Permit me to say—fellows and members of the College of Physicians of London are not allowed to take partners, or to make-up and charge for medicines, nor can they receive any percentage from chemists who make-up their prescriptions. The title licentiate is equivalent to a membership of Apothecaries' Hall, and granted to several practitioners who can, I believe, prescribe and make-up a bottle of physic, and charge and sue for the same, similar to a grocer who makes up a pound of tea or sugar to order, and sues for the amount under the "Tradesman's Act."—Yours truly, PHYSICIAN.

P.S.—I shall be glad to know if the licentiateship of any other British medical college is granted on the same terms as the membership of the Royal College of Physicians of London.

[We believe the licentiateship of the Dublin College corresponds in the above respects to the membership in London, and, perhaps, to that in Edinburgh. In the Edinburgh College the licentiateship seems to correspond, in most respects, with the rank of the same name in London; while in Dublin there is no rank analogous to the lowest in the other two colleges. Indeed, in the Dublin College, none are members but the Fellows, who are about as numerous as the Fellows of the larger colleges at Oxford or Cambridge.—ED. M.P. & C.]

MEDICAL DIARY OF THE WEEK.

WEDNESDAY, APRIL 3.

UNIVERSITY COLLEGE HOSPITAL.—Operations, 2 P.M.
ST. MARY'S HOSPITAL.—Operations, 2 P.M.
MIDDLESEX HOSPITAL.—Operations, 1 P.M.
LONDON HOSPITAL.—Operations, 2 P.M.
ST. BARTHOLOMEW'S HOSPITAL.—Operations, 1½ P.M.
GREAT NORTHERN HOSPITAL.—Operations, 2 P.M.
ST. THOMAS'S HOSPITAL.—Operations, 1½ P.M.
OPHTHALMIC HOSPITAL, SOUTHWARK.—Operations 2 P.M.
METROPOLITAN ASSOCIATION OF MEDICAL OFFICERS OF HEALTH.—4 P.M. Meeting.
OBSTETRICAL SOCIETY OF LONDON.—7½ P.M.: Council Meeting, 8 P.M.: Special Meeting.

THURSDAY, APRIL 4.

ST. GEORGE'S HOSPITAL.—Operations, 1 P.M.
CENTRAL LONDON OPHTHALMIC HOSPITAL.—Operations, 1 P.M.
LONDON SURGICAL HOME.—Operations, 2 P.M.
ROYAL ORTHOPÆDIC HOSPITAL.—Operations, 2 P.M.
WEST LONDON HOSPITAL.—Operations, 2 P.M.
UNIVERSITY COLLEGE HOSPITAL.—Operations, 2 P.M.
HARVEIAN SOCIETY OF LONDON.—8 P.M. Dr. Chapman, "On Paralysis." Dr. C. Meredyth, "On Hygiene in Relation to Syphilis."
ROYAL INSTITUTION—3 P.M. Mr. Pengelly: "Antiquity of Man."

FRIDAY, APRIL 5.

WESTMINSTER OPHTHALMIC HOSPITAL.—Operations, 1½ P.M.
ROYAL INSTITUTION—3 P.M. Mr. Pengelly: "St. Michael's Mount."
WESTERN MEDICAL AND SURGICAL SOCIETY.—8 P.M. "Narration of Cases."

MEDICAL APPOINTMENTS.

BARON, T., M.R.C.S.E., late of St. Thomas's Hospital, has been appointed Junior House-Surgeon to the Royal Infirmary, Liverpool, vice C. Puzey, L.R.C.P.L., appointed House-Surgeon.

BOND, T., M.B., B.Sc.Lond., F.R.C.S., has been appointed Surgeon to the A Division of Police, Hon. Surgeon to the Royal Humane Society (St. James's-park District), and Civil Examining Surgeon to the Royal Marine Recruits.

DAVIDSON, J. H., M.D., has been appointed Assistant Medical Officer to the Cheshire Lunatic Asylum, Chester, vice J. Norrish, M.R.C.S.E., resigned.

EXELL, E., M.R.C.S.E., has been appointed Resident Medical Officer to the Eastern Dispensary, Bath, vice F. C. P. Howes, M.R.C.S.E., resigned.

GAVIN, Michael Freebern, M.D., L.R.C.S.I., has been appointed Assistant Oculist City Hospital, Boston, U.S. Highest number of marks by competitive examination.

HAWKINS, J. V., M.D., has been appointed a Justice of the Peace for the Borough of Lynn.

LUCAS, H., M.R.C.S.E., has been appointed Surgeon to the County Gaol, Huntington, vice M. Foster, M.D., resigned.

MINCHIN, H., M.B., F.R.C.S.I., has been elected Professor of Botany in the Royal College of Surgeons, Ireland, vice the late Arthur Mitchell, M.D., L.K.Q.C.P.I., F.R.C.S.I.

OXLEY, C. F., M.R.C.S., L.R.C.P.Ed., late House-Physician at Westminster Hospital, has been appointed Junior Assistant Medical Officer to the West Riding County Lunatic Asylum, Wakefield.

PUZEY, C., L.R.C.P.L., recently Junior House-Surgeon to the Royal Infirmary, Liverpool, has been appointed House-Surgeon, vice G. B. V. Nash, M.R.C.S.E., resigned.

ROBINSON, J., L.R.C.P.Ed., has been appointed House-Surgeon to the Cumberland Infirmary, Carlisle, vice Dr. Braidwood, resigned.

TREMEARNE, Mr. J., has been appointed House-Surgeon to the United Hospital, Bath, vice Mr. T. D. Saunders, whose appointment has expired.

TURNER, D., L.R.C.S.Ed., has been appointed one of the Medical Officers for the Parish of St. Mary, Islington, vice A. C. Cockerton, L.R.C.P.Ed., resigned.

MEDICAL VACANCIES.

Birmingham and Midland Eye Hospital—House-Surgeon.
Birmingham Borough Lunatic Asylum—Assistant Medical Officer.
Builth Union (Abergwessin District)—Medical Officer, vice Dr. Bloomenthal, resigned.
Great Northern Hospital—House-Surgeon.
Lock Hospital—House-Surgeon.
Salford Union Workhouse—Resident Medical Officer.

Births, Marriages, and Deaths.

Announcements are inserted without charge, and must in all cases be authenticated with the signature of the sender.

BIRTHS.

KITCHING.—On the 20th of Jan., the wife of Thos. Kitching, M.R.C.S.E., &c., District Surgeon of Prince Albert, Cape of Good Hope, of a son.

WILSON.—On the 19th ult., at Wendover, the wife of Henry Wilson, M.R.C.S., of a son.

RUSSELL.—On the 20th ult., at Accrington, Lancashire, the wife of Wm. Smyth Russell, M.R.C.S.E., of a son.

WIGG.—On the 21st ult., at Southminster, Essex, the wife of Thomas Carter Wigg, M.R.C.S.E., of a daughter.

HAMILTON.—On the 21st ult., at Lyons, the wife of R. Hamilton, F.R.C.S.E., of Princes-road, Liverpool, of a son.

CHARTERIS.—On the 22nd ult., at Croft House, Thornton, Bradford, the wife of William Charteris, L.R.C.P. & S. Ed., of a son.

SAUNDERS.—On the 25th ult., at Cuckfield, Sussex, the wife of C. E. Saunders, M.D., of a daughter.

MADDEN.—On March 31st, at 9, Great Denmark-street, Rutland square, Dublin, the wife of Dr. Thomas More Madden, of a daughter.

MARRIAGES.

BAILEY—DUCE.—On March 19, at St John's Church Wednesbury, T. Bailey, Esq., Surgeon, Godstone, Surrey, to Eleanor, youngest daughter of the late J. Duce, Esq., Great Stanmore.

COGAN—DUFFIELD.—On March 16, at Brighton, J. Cogan, M.D., to Agnes, youngest daughter of the late T. Duffield, Esq.

GRAVES—CUNNINGHAM.—On March 21, at Holy Trinity Church, Paddington, F. C. Graves, M.D., of 1, Westbourne-park-villas, to Jessie Johnstone, eldest daughter of the late C. Cunningham, Esq., Accountant, Glasgow.

DEATHS.

BULLOCK.—On March 26, at 84, Manor-street, Chelsea, E. J. Bullock, L.R.C.P. Edin., aged 47.

DRUMMOND.—On March 21, at 62, Marine-parade, Brighton, and of 15, Westbourne-terrace, Hyde-park, H. Drummond, M.D.

STEELE.—On March 23, at Liverpool, Elizabeth Augusta, the wife of A. B. Steele, M.R.C.S.E., aged 48.

WOODFALL.—On March 22, at Maidstone, J. W. Woodfall, M.D., in his 57th year.

Lectures.

LUMLEIAN LECTURES

DELIVERED AT THE

ROYAL COLLEGE OF PHYSICIANS OF LONDON.

By J. RUSSELL REYNOLDS, M.D., F.R.C.P.,

HOLME PROFESSOR OF CLINICAL MEDICINE IN UNIVERSITY COLLEGE, PHYSICIAN TO UNIVERSITY COLLEGE HOSPITAL, AND TO THE NATIONAL HOSPITAL FOR THE PARALYSED AND EPILEPTIC.

LECTURE II.

ON SOME OF THE RELATIONS BETWEEN MEDICAL AND LEGAL PRACTICE.

The object of the first lecture was to show that medical testimony sometimes fails of its legitimate effect because it is not scientific; that of the second lecture is to explain why and how it may fail when it is. It was shown in the former lecture that when evidence is incomplete, inaccurate, or uncertain, it does not meet the requirements of the case; the purpose of this lecture is to prove that when scientific testimony is complete, accurate, and definite, it passes beyond or through the lines of legal precedent.

The points now to be considered are those which indicate the existence of a radical difference between the tendency of scientific study and of legal practice—that of the former being to destroy artificial lines, that of the latter to create and use them. 1st—That science in all its departments is obliged to make temporary use of artificial distinctions; 2nd—That as it advances these distinctions are swept away, and new lines of difference are substituted for them; 3rd—That, together with the discovery of previously unobserved distinctions, there is that, also, of unrecognised similitude; 4th—That the tendency of scientific growth is such as to show that likeness is greater than unlikeness—that the points of distinction are relatively trivial, while those of agreement are essential; 5th—That this is true of the simple as well as of the complex sciences—true of physics and of chemistry as well as of physiology and pathology; 6th—That science being guided by a law of growth, and legal practice governed by a law of precedent or past agreement, there must be collision between them when they attempt to express or expound each other; 7th—That, resulting from the adhesion to an agreement based upon antiquated science, wrong issues must be raised in cases of medico-legal investigation; 8th—That the illustrations of this are frequent in regard of the mode of dealing with the insane, with cases of infanticide, and rape; 9th—That common sense and legal technicalities are at variance in relation to the treatment of those who are admitted to be "mad;" 10th—That the medical witness may give some information on a case from his special knowledge, but that, in the majority of instances, he does not act upon scientific, but upon common grounds; 11th—That there is no universally applicable and valuable test of insanity; 12th—That "delusions" have only a relative value, determined by the readiness with which their nature can be appreciated; 13th—That the frequently employed tests with regard to "responsibility" are unsatisfactory; 14th—That the questions of respiration and of independent life are irrelevant to the cases of infanticide, although they may be valuable in regard of the birth of an heir; 15th—That in criminal assaults the points often raised have nothing whatever to do with the guilt of the accused, or the injury inflicted upon the accuser. The object of this second lecture was thus to show that some of the reasons for dissatisfaction with the results of medico-legal inquiry are to be found in the fallaciousness of the tests to which science is submitted, and not in the nature of science itself, which, although it may and must change its ground, is ever advancing towards a more accurate appreciation and valuable application of the truth.

Original Communications.

ON DREAMING, CONSIDERED ESPECIALLY IN RELATION TO INSANITY.

Read before the Medical Society of the College of Physicians, Dublin, March 20th, 1867.

By THOMAS MORE MADDEN, M.R.I.A.,

LICENTIATE OF THE KING AND QUEEN'S COLLEGE OF PHYSICIANS IN IRELAND, MEMBER OF THE ROYAL COLLEGE OF SURGEONS OF ENGLAND, AUTHOR OF AN ESSAY "ON INSANITY AND THE CRIMINAL RESPONSIBILITY OF THE INSANE," "ON CHANGE OF CLIMATE, A GUIDE FOR TRAVELLERS IN PURSUIT OF HEALTH," &c., &c., &c.

The subject of the following communication is a branch of medical psychology, which many years ago was discussed before the former Medical Association of this college in a paper by Mr. Andrew Carmichael, read before the Association on the 6th of April, 1818, by Dr. Brooke, and printed in the transactions for that year. As, however, I purpose to treat the subject from a different point of view to that adapted by Mr. Carmichael in his "Essay on Dreaming, including conjectures on the proximate cause of Sleep," above referred to, I mention this fact merely to show that the question of dreaming, considered especially in relation to the study of insanity, seems to be a matter not unworthy of the attention of this Society, also, which now represents the former Association of the members of the College of Physicians.

In considering the nature and causes of insanity I was often struck by the close resemblance which appears to exist between the state of the mind in insanity, and in the dreaming condition. And I have now attempted to digest the notes I made on this subject during some years into regular form, in the hope of being able to contribute something to what is known concerning a very obscure branch of mental science, and one which may possibly throw some light on the nature of the morbid action in the mind which constitutes insanity.

By the majority of scientific writers, dreaming has been considered from a purely metaphysical point of view, and perhaps on that account has received less attention than it deserves from physiological and pathological inquirers, who too often seem to ignore the truth, well expressed by Reid, that—"Medical cannot be separated from moral science without essential mutilation." I know hardly any work in the English language that treats of this question in a full and satisfactory manner.

The best account of the physiology of dreaming which I am acquainted with is that contained in Sir Henry Holland's "Chapters on Mental Physiology," which, interesting and suggestive as it is, yet leaves some parts of the inquiry altogether untouched, and hardly even alludes to the diagnostic and prognostic value of the signs furnished by this condition of the mind.

I therefore hope that I may claim the indulgent consideration of the Medical Society for the following attempt to elucidate the question of dreaming as one of the most interesting problems connected with mental physiology. And I believe that I shall be able to show that this condition of the mind affords indications which, if rightly interpreted, are calculated to throw light on the diagnosis and prognosis of some of the most obscure diseases which affect mind and body.

I. VARIOUS THEORIES OF DREAMING, ANCIENT AND MODERN.

What a dream really is? and how and why we dream? are questions which have been investigated by some of the greatest philosophers of every age, but which, nevertheless, still remain unsolved. Before laying my own views on these questions before the Medical Society, I shall first briefly allude to some of the most remarkable theories on the subject; as even in the wildest speculations on philosophical questions we may occasionally discover some vestige of truth, or at least, may learn to avoid the errors of our predecessors.

In Homer we find the idea that—"Dreams descend from Jove."(1) Herodotus makes Artabanus tell Xerxes that "Dreams in general originate from those incidents which have most occupied the thoughts during the day."(2) Epicurus, we are told, taught that dreams were occasioned by "images" which were supposed to emanate from all material bodies, and that being of extreme tenuity these images penetrated into the mind, although the senses were closed, during sleep, and excited in the sensorium a perception, or dream, of the object from which they proceeded. This absurd idea was subsequently adopted, and amplified by Lucretius.

In the treatise "On Dreams," commonly attributed to Hippocrates, which, although its authenticity is disputed by the late Dr. Adams, is of unquestionable antiquity, being quoted by Galen, we find an exposition of the opinion of the early Greek physicians on the subject—"When the body is at rest the soul being then in a state of movement steals over the organs of the body, manages its own abode, and itself performs all the actions of the body; for the body being asleep does not perceive, but the soul being awake beholds what is visible, hears what is audible, walks, touches, is grieved, reflects, and in a word, whatever the offices of the soul and body are, all these the soul performs in sleep. Whoever then knows how to judge of all these correctly will find it a great part of wisdom."(3)

Most of the early medical writers allude to the species of dreams to which Hippocrates refers in the passage I have just cited, and which they imagined often revealed the remedy for whatever disease the dreamer suffered from.

Galen tells us that Æsculapius was supposed to assist the sick in dreams, and in them that he pointed out the proper remedy for whatever disease the patient might suffer from.(4) When Galen himself was suffering from inflamation of the diaphragm, we read that he was instructed in a dream to open a certain vein, which he did, and recovered. Also the physician Abin Zoar acquired in the same way a knowledge of the medicine, by the use of which he was cured of a severe ophthalmia. But it was among the Greeks that this idea was fully developed and formed into a regular system.

In the first volume of Sprengel's great work on the "History of Medicine," is a most interesting account of the manner in which the Greek's prepared themselves before sleeping in the temples of Æsculapius, and of the dreams with which they were visited in these places.(5)

Speaking of the uses of dreams, Jamblicus says:—"And bodies, indeed, that are diseased it heals; but properly disposes such things as subsist amongst men erroneously and disorderly. It likewise frequently delivers the discoveries of arts, the distribution of justice, and the establishment of legal institutions. Thus, in the temple of Æsculapius, diseases are healed through divine dreams; and through the order of nocturnal appearances, the medical art is obtained from secret dreams."(6) Herodian tells us that Antonius being ill, "hastened to Pergamus, in Asia, with intent to apply to Æsculapius for the recovery of his health, and there amused himself with dreams."(7) Aristophanes gives a detailed account of the rites used to invoke a dream in the temple of Æsculapius in his comedy of *Plutus*, or Wealth (Act iii., Scene 2nd). But if, notwithstanding these rites and preparations, the patient did not dream of any remedy, we are told by Artemidorus,(8) that whatever the patient happened to dream about was considered as allegorical of the remedy. Though, as Sir Thomas Brown well observed, "A man might have been hard put to it, to interpret the language of Æsculapius, when, to a consumptive person, he held forth his fingers; implying, thereby, that his cure lay in dates, from the homonomy of the Greek, which signifies dates and fingers."(1) Being thus vague, these dreams were interpreted by the guardians of the temples, who appear to have generally been shrewd and observant physicians. Plato's theory on this subject was, that dreams are caused by demons, or spirits, which he imagined filled the earth and air; and that some of these spirits being of good, and others of evil, natures, gave rise to corresponding dreams.(2) Wild and fanciful idea as this is, it is not a little strange to see it advocated by a very sober Scotch philosopher of the 17th century, with some slight modification. "Our dreams," says Mr. Baxter, "are promoted by separate immaterial beings." And again, he argues that "these beings lie in wait for, and catch the opportunity of the body, to represent, at the same time, something frightful to the mind."(3)

More rational than the last quoted speculation was Aristotle's opinion, which, in reality, differs very little from that supported by some modern metaphysicians. He says that every visible object makes an impression on the mind, but that this impression may remain in a latent condition, until it be called into active existence, during sleep, by motions in the brain, commenced before slumber has occurred, but continuing to operate in sleep, and giving rise to a dream, which is a "*Phantasma*" or appearance of a thing, after the object itself is removed.

In the "Dæmonalogia" of Don Francesco Torreblanco, published in the early part of the 17th century, the opinions then prevalent on this subject are thus stated:—"The visions or dreams which occur in sleep are either to be ascribed to God, nature, or the devil. Those which are from God are distinguishable from those which are to be attributed to the devil, as we are told by Gregory the Great—'Holy men discern between illusions and revelations, and distinguish the sounds emitted, and images perceived in those visions when cast into deep sleep, so as to know those which emanate from a good spirit, and those which they suffer from (contrary) illusions.'"(4)

There have been many theories as to the moral significance of dreams, which at very remote periods of time have expressed a very similar idea, as may be seen by the following instances:—Zeno was of opinion that we might judge of our advancement in virtue from our conduct in dreams; and that if, in sleep, we discover that our minds are prone to yield to our passions, it is a clear indication that we have great need to watch over ourselves.(5) Sir Thomas Brown says the same thing in other words—"However dreams may be fallacious concerning outward events, yet they may be truly significant at home; and whereby we may more sensibly understand ourselves. Men act in sleep with some conformity unto their awakened senses; and consolations or discouragements may be drawn from dreams which intimately tell us ourselves . . . . . Persons of radical integrity will not easily be perverted in their dreams, nor noble minds do pitiful things in sleep."(6) The last opinion I shall quote on this point is that of probably the most philosophical medical writer of the 19th century, the late Sir Benjamin Brodie, who says:—"Dreams are, at any rate, an exercise of the imagination, and one effect of them may be to increase the activity of that important faculty during our waking hours. As they are influenced by our prevailing inclinations, so they may help us to form a right estimate of our own characters; and assuredly it would be presumptuous to say that they may not answer some still further purpose in the economy of percipient and thinking beings."(7)

I shall conclude this brief notice of the various theories

(1) Homer, "Iliad" Book, i. line 86.
(2) Herodotus, "Polymnia" chap. xvi.
(3) See Dr. Adams, "Disquisition on the authenticity of the different treatises attributed to Hippocrates," prefixed to Sydenham Society Edition of Hippocrates, vol. i. p. 82.
(4) Galen, "De Sanit, Tuend." Lib. i., cap. 8.
(5) Sprengel, "Histoire de la Médicine, Traduite de l'Allemend par. M. Jourdan, tome premier." Pp. 160, 161. Paris, 1815.
(6) Jamblicus, "On the Mysteries." Section iii., chap. 3, page 120 Translated by Taylor. Cheswick, 1821.
(7) Herodian's "History of his own Times." Translated by Hart, p. 181. London, 1749.
(8) Artemidorus, "Oneirocritica." Lib. iv., cap. 24, p. 215.

(1) Sir Thomas Brown, "On Dreams." Works vol. iv., p. 357.
(2) Plato's "Republic." Book vii. 215, 257.
(3) Baxter's "Inquiry into the Nature of the Human Soul." Pp.
(4) Torreblanco, cited in Dr. R. R. Madden's "Phantasmata; or, Illusions and Fanaticisms." Vol. i., p. 104. London, 1857.
(5) Plutarch in "Life of Zeno."
(6) Sir Thomas Brown, "On Dreams." Works vol. iv., p. 357. Edition of 1835.
(7) Sir Benjamin Brodie, "Psychological Inquiries," &c. Part first, p. 158. Fourth Edition. London, 1862.

of dreaming by citing an English philosopher of the 17th century, a German metaphysical writer of the present day, and a French author, whose work on this subject has been approved of by the Institute of France. All these convey the same theory in different forms. The first—Thomas Hobbs, of Malmsbury, says—"Dreams are the imagination of them that sleep. . . . There is a reciprocation of motion from the brain to the vital parts, and back from the vital parts to the brain; whereby not only imagination begetteth motion in these parts, but also motion in those parts begetteth imagination like to that by which it was begotten."(1) Baron von Feuchtersleben, an eminent German phychologist, asserts that "dreaming is nothing more than the occupation of the mind in sleep with the pictoral world of fancy."(2) Monsieur Lemoine, in his interesting work, "Du Sommeil," thus defines a dream:—"Un rêve," he says, "properment dit, reduit à sa simplicite élémentaire, à sa pureté parfaite, c'est une sensation, c'est une vision, c'est une image excitée tout à coup dans l'âme par un mouvement intestine de l'organe et qui s'evanouit avec sa cause organique."(3)

THE NORMAL STATE OF THE MIND DURING SLEEP.

The question we have first to consider is, whether the mind during sleep is always occupied by dreams or not? And if not, when, and under what circumstances do dreams occur? Most metaphysical writers on this subject incline to Lock's opinion, that we do not dream always when asleep, for we do not think always, and he argues that we "cannot think at any time, waking or sleeping, without being sensible of it." Therefore, Lock concludes, that "most men pass a great part of their sleep without dreaming."(4) Reid and McNish are of a similar opinion. A much higher authority on all physiological questions than any of those I have just named,—Dr. Carpenter holds the same views on this subject,(5) and Lord Brougham in his "Discourse on Natural Theology," expresses his belief that we dream only in the intermediate condition between sleeping and waking. The experience, however, of the great majority of observers confirms the opposite opinion—namely, that we seldom, if ever, sleep without dreaming, although in many cases we have no recollection whatever of having dreamt. Baron Von Feuchtersleben holds that, "we, in fact, never sleep without dreaming."(6) German metaphysicians, as for example, Kant and Von Schlegel,(7) generally incline to the same opinion; and the highest authorities in this country on mental science believe dreaming to be the normal state of the mind during sleep. The late Sir Benjamin Brodie, says, "I should myself be inclined to doubt whether we ever sleep without some degree of dreaming. At any rate, not to dream seems to be not the rule, but the exception to the rule."(8) Sir Henry Holland, too, argues that sleep without dreams does not exist; "for," he says, "otherwise there would be two states of sleep more remote from each other than we can conceive any two conditions of the same living being—one in which sensations, thoughts, and emotions are present in activity and unceasing change, another in which there is the absence or nullity of every function of mind—annihilation, in fact, for the time, of everything that is not organic life."(9). I shall only quote one other authority which, however, appears to me to decide the question. Sir William Hamilton made a series of experiments on himself with regard to this point by causing himself to be aroused from sleep at certain fixed intervals, and when thus suddenly awakened from sleep always found that he was either interrupted in the course of some dream, which he remembered, more or less perfectly, or else felt aware, at least, that he was not aroused from an unconscious state.(1)

(1) The English Works of Thomas Hobbs (of Malmsbury). Edited by Sir W. Molesworth. "Tripos," vol. iv., p. 10. London, 1840.
(2) "The Principles of Medical Psychology." By Baron von Feuchtersleben. Sydenham, 8vo, translation, p. 163. London, 1843.
(3) Dr. A. Lemoine, "Du Sommeil Au Point de vue Physiologique et Psychologique." Ouvrage coronné par L'Institut de France. P. 155. Paris, 1855.
(4) An Essay concerning the Human Understanding. Book ii., Cap. i., Sect. 10-19.
(5) Dr. Carpenter. Article, Sleep. *Cyclopedia of Anatomy and Physiology*. Vol. iv., Pp. 6-90. London, 1852.
(6) Von Feuchtersleben's Medical Psychology. Translated by Lloyd and Babington. Pp. 164-165. London, 1847.
(7) Von Schlegel's Philosophy of Life. Translated by the Rev. Mr Morrison. P. 23. London, 1847.
(8) Sir B. Brodie, Pyschological Inquiries. Vol. i., p. 151. London, 1862.
(9) Sir H. Holland's Chapters on "Mental Physiology." London, 1852.

CASE OF BOTHRIOCEPHALUS LATUS, OCCURRING IN IRELAND.

By Dr. WM. FRAZER, M.R.I.A.,

HONORARY MEMBER OF THE MEDICO-CHIRURGICAL SOCIETY OF MONTREAL, ETC.

The intestinal worms, though their appearance is repulsive, are a class of animals which have strong claims on the notice of scientific naturalists. They are distinguished by extreme fecundity and tenacity of existence; they display remarkable structural modifications, and certain of them pass through singular metamorphoses during their development. Some portion of the obscurity that surrounded their life-history has already been dispelled by the exertions of able observers, and still enough remains unexplained to stimulate future discovery, whilst the part already known is of surpassing interest.

The practising physician will regard the subject of entozoa from a different aspect, and attach importance to them, from their intimate relation with questions bearing upon public health; he is concerned about the serious symptoms they sometimes cause, and the most effectual means of securing their expulsion. Some of these entozoa have colonized us as thoroughly as we have colonized the land, they are common and well-known pests; others that infest the inhabitants of distant countries reach our shores by importation within the bodies of their unwilling hosts; these stray visitors do not deserve to rank with our indigenous fauna; their appearance deserves recording in our lists in the same manner that some wandering bird or insect is noted that has arrived here, driven by storm or flight from its ordinary home. The broad tape-worm or bothriocephalus is one of these accidental and rare entozoa, the present instance being the fourth discovery in Ireland; it appears of authentic record of its occurrence in Ireland; it appears of authentic record of its occurrence in Ireland; it appears of authentic record of its occurrence

Poland, where it is common, and remained tenanting it in a peaceable manner until some of the joints accidentally came into my possession.

The specimens consisted of two fragments, which were three and a half, and five inches long when recent; they are composed of the mature joints. The animal was alive when I obtained it, the worm moving, and its muscular fibres contracting, though slowly; its colour was pale yellowish white; after being immersed in spirit, it diminished in length and breadth, and acquired a greyish yellow hue. The entozoon corresponds in all respects with the published descriptions given by Cobbold, in his work on "Entozoa." It is, therefore, needless to describe it more fully.

Dr. O'Brien Bellingham published, in the first series of the "Annals of Natural History," several papers on intestinal worms found in Ireland in men and animals, which afford a store of reliable information of great value regarding these creatures. Dr. Bellingham, who devoted years to their study, states that the solitary specimen of bothriocephalus latus in his possession was given him by Dr. Aquilla Smith; it was found several years before when examining the intestines of a man who died in one of the Dublin Hospitals. He further says:—"I have only heard of two other instances in which it has occurred in Dublin; once it was met with by the late Dr. Macartney, and once by Dr. Graves, but I have had no opportunity of examining the specimens in either case." I have failed to discover any clue to the first of these cases; that of Dr. Graves is briefly recorded in a communication to the Pathological Society of Dublin (see *Dublin Medical Journal*, old series, vol. 17, p. 514.)

The genus bothriocephalus, to which this worm belongs, as constituted by Rudolphi, contains few species. The greater number are parasitic, living inside fish or birds; they are rare in mammals, and very rare in reptiles. Man is infested by one of them, and we are indebted to Bremser for determining its characters and removing it from the tæniæ to which it had been erroneously referred.

Hospital Reports.

LONDON HOSPITAL.

STATISTICAL ACCOUNT OF ACCIDENTS ADMITTED DURING THE WEEK COMMENCING MARCH 26TH.

By JAMES ADAMS, House Surgeon.

Fractured ribs	2
Fractured femur	2
„ tib. and fibula	4
„ fibula	2
Dislocation of humerus into axilla	2
Separation of upper epiphysis of humerus	1
Compound fracture of radius and ulna	1
Burns (6 from one explosion)	7
Scalds (2 of throat in children, vide infra)	4
Gunshot wound of face (suicidal, not severe)	1
Foreign body in œsophagus	1
Local inflammations from injury	4
Erysipelas of leg from injury	1
Concussion	2
Incised and lacerated wounds	6
Contusions	2
	42
Admitted as out-patients	283
Total	325

The compound fracture of radius and ulna was a very severe accident. The patient, a little girl aged five years, had been trodden on by a horse; there was a laceration of skin about two inches in length, with a piece of the ulna about one and a-half inch in length protruding, this I removed by the bone forceps, the arm was then placed upon a splint with the wound exposed, and the case is now progressing favourably.

Among the patients treated in the receiving room and made out-patients, a curious "run" of cases occurred. In eight consecutive days (6 days being of the preceding week, and the cases of those days being under the care of Mr. Disney Thorp, and the first two days of the week commencing March, 26th), no less than seven dislocations of the humerus occurred. Six of them were subcoracoid, and one subelgnoid; reduction was effected at once in all; some by the heel in the axilla, and the others by extending the arm above the head. Chloroform was administered in two cases.

As seen by the table there were two cases of scald of the throat, both in children from drinking boiling water from the spout of the kettle; both occurred on the same day, viz.—Sunday, March 31st. One child was brought about three hours after the accident suffering from considerable difficulty in breathing, each inspiration being accompained by a crowing noise; the chest, however, was well filled at each inspiration, and there was no lividity of face. The child was placed in bed, and flannels wrung out in boiling water were kept applied as hot as possible to the throat until the skin became quite red. In a few hours respiration became much easier, and by the following morning the child was comparatively well.

The other child had been taken to a chemist, who had given a powder and said that the case was of no consequence, so the mother delayed bringing it until the next day; when admitted, the child appeared to be dying; the face was livid and cold, the eyes fixed, and respiration was accomplished with the utmost difficulty. I immediately performed tracheotomy, but the child sank shortly after.

METROPOLITAN FREE HOSPITAL

Under the care of Dr. CHARLES DRYSDALE.

TINEA DECALVANS (A CASE OF COMPLETE BALDNESS, WITH REMARKS).

Mary P., age 15, was brought to see Dr. Drysdale by Mr. Sterling, house-surgeon to the hospital, February 15th, 1867. This patient was almost entirely without hair on the scalp; with the exception of about a dozen hairs on the frontal region, and one or two on other parts of the scalp, there was nothing to be seen but a downy cotton-like growth, most visible on the occipital and the parietal regions. The patient was well nourished, and though not fat, was by no means thin. Her health was good, with the exception of occasional headaches—menstruation had occurred once or twice. There were some hairs, but not many, in the regions of the eye-brows.

History.—She is one of a family of four children; none of her brothers or sisters have suffered from this complaint. The baldness first commenced at the age of four years in circular patches, which enlarged and at length became, after partial reappearances, as at present, total. Dr. Drysdale observed that much of the hair was irrevocably lost; but that, if the downy hairs were carefully extracted, and a parasiticide composed of Hydrargyri Bichloridi gr.j. ad. aq. ℥j., were used for some months, *it was possible* that some of the hairs might grow again.

Willan described, under the name of *porrigo decalvans*, a species of tinea, which Mr. Cazenave afterwards described as vitiligo, in which the latter observer confounded it with another disease, where the hairs become blanched, but do not fall. Gruby, Audouin, and others have met in this affection a vegetable parasite *microsporon*, and the illustrious observer M. Bazin, has confirmed the existence of this parasite. We may then define tinea decalvans as a parasitic disease, which affects every part of the hairy system and causes a fall of the hair, and the presence of a cotton-like down upon the part affected, caused by the presence of a fungus called microsporon Audouini. At first, in this disease the hairs become dull, dry, and less glistening, and easily pulled out whilst the skin becomes pale beneath. After the fall of the

hairs, a cotton-like down is observed on the surface of the scalp, upon which down a white dust is to be observed, consisting of the parasitic growth. In a later stage of the disease, we no longer find any down, and there is atrophy of the scalp and irremediable baldness.

The disease ordinarily appears in the form of rounded patches, surrounded by healthy hair, which patches continually tend to become larger from the extension of the parasitic growth. This may go on until every hair in the body is destroyed. The cure of this disease sometimes comes on spontaneously, as in the case above cited, for a time; in certain cases it does not go further than the downy period.

This result is much favoured by pulling out the hairs and using a parasiticide, such as gr. j. of Hydrarg. Bichlor. to aquae ʒi. with q.s. of alcohol. This application must be made for a long time to the parts affected. The appearance of the cryptogams under the microscope is similar to that in other parasitic diseases, except that the mycelium is in greater quantity, and the spores are said to be rather smaller.

The diagnosis of tinea decalvans is rather easy. There are two pathognomonic symptons—(1) the fall of the hair, (2) the existence of down. It need rarely be confounded with favus or tinea tonsurans, since in favus there are crusts and cups, and the hairs do not all come out; again, in tinea tonsurans the hairs are broken, and the skin is coloured brown and covered with scales. The *prognosis* is generally grave as far as bladness is concerned, unless vigorous means are made use of. The disease is very contagious, and Dr. Drysdale has seen three cases of it in the same family at one time. It is, perhaps, more common in children, than in adults. The treatment must consist of epilation of a large space of the hair in the vicinity of the patch, and the long application, by means of a sponge, of the parasiticide lotion above referred to. In some cases, it is extremely difficult to extract the hairs, which break easily. When the disease has come to the last stage, all treatment is useless. Mr. Erasmus Wilson and other observers in this country seem to err in believing that cases like those cited above may be caused by nervous weakness. The baldness caused by wasting diseases, such as phthisis, syphilis, fevers, and senile baldness, &c., are easily diagnosed from that which is gradually caused by well defined patches progressing, as in this patient, because unchecked by treatment, towards total baldness.

ST. GEORGE'S HOSPITAL.

CASE OF HERNIA.

Under the care of Mr. POLLOCK.

L. A., aged 46, a married woman, was admitted on January 28th, 1867, under the care of Mr. Pollock, with strangulated femoral hernia.

She stated that on the 25th, at about ten A.M., she was carrying a pail of water up stairs when she suddenly felt faint and sick, and noticed a tumour in the right groin; had never been ruptured before; ice was applied.

There is a tumour in the right groin about the size of a walnut, very tender but not painful; the skin over it is reddened, and *cannot be moved over* the subjacent parts, being bound down to them. There is severe pain in the abdomen with frequent, though not stercoraceous, vomiting.

At four P.M., the operation was performed by Mr. Pollock; the tissues were found thickened by inflammation; the sac was opened and found to be almost dry, containing a small quantity of semi-purulent lymph, a piece of omentum in a state of intense congestion, bordering on gangrene; and a knuckle of small intestine completely sphacelated in one part, the gangrene, however, not implicating the entire circumference of the gut; the stricture was very tight; it was divided; the omentum ligatured and cut off; the bowel stitched to the margin of the wound, and the gangrenous portion slit open; a small quantity of fæcal fluid escaped. There was little or no hæmorrhage during the operation; beef-tea two pints.

Five P.M., pil. opii., gr. ij., statim. Ten P.M., rep. pil, gr. j., st.

29th: Four A.M. Rep. pil, gr. j., st.

Had snatches of sleep during the night; vomited once, and now has nausea; there is slight tenderness in left side of the abdomen, but no pain; tongue clean and moist; pulse quite weak, 80; skin cool; there is slight fæcal discharge from the wound.

Ten P.M. Rep. pil, gr. j., st.

30th: A great deal of fæcal matter has been discharged from the wound; patient is very weak, and is evidently sinking. Sp. vini gall., ʒvi, quot; arrowroot.

31st: Died.

For the notes of the post-mortem examination we are indebted to Mr. Pick, Curator of the Museum:—

Externally.—The body was in good condition.

There was a sloughy wound in the right groin, two inches long.

Thorax.—The lungs were congested and full of blood. The bronchi contained mucus. The heart was uncontracted, the valves blood-stained, the aorta atheromatous.

Abdomen.—The liver was congested. The spleen rotten. The left kidney was converted into a bag of cysts, and a calculus was formed, blocking up the ureter. The small intestines in the right iliac region were intensely injected and glued to the abdominal wall. There was an opening in them which communicated with the external wound, higher up was a second opening which communicated with the abdominal cavity, the mucous membrane being more destroyed than the serous.

The pelvis contained liquid fæces. It is a question whether the rupture was finally caused by tearing the intestines apart in removing them in consequence of their already weakened condition, or whether it occurred during life.

Mr. Pollock remarked that this was one of those lamentable cases in which operative interference had been too long delayed.

It was evident from the length of time that had elapsed since the first symptoms of strangulation appeared, and from the state of the integument over the tumour, that severe mischief had occurred to the strangulated intestine. The skin was bound down by inflammatory thickening to the subjacent parts, and was a clear index to what had been going on in the sac.

It was of importance to diagnose between inflamed glands, and a hernia such as the present.

In both the appearances are similar. A swelling is formed in the groin, without impulse on coughing, and covered with reddened skin. The absence or presence of vomiting and other symptoms of strangulation, would be the data on which to found the diagnosis. But if, with symptoms of strangulation, the first incision revealed suppurating glands, it would be proper to pursue the investigation, and for the surgeon to satisfy himself that a hernia did not exist elsewhere, as both might coexist in the same case. In this instance the prognosis was unfavourable; for if the patient recovered from the immediate dangers that surrounded her, and an artificial anus were established, she might die of inanition, as it was impossible to say how low down the gut had been opened.

The almost dry condition of the sac was that described by Mr. Laurence, and was due to the extreme tightness of the stricture.

HARVEIAN SOCIETY OF LONDON.—March 27.

Dr. Pollock, President.

COMMITTEE FOR THE PREVENTION OF VENEREAL DISEASES.

Present—Dr. Broadbent, Mr. Weeden Cooke, Dr. Chapman, Mr. Curgenven, Dr. C. Drysdale, Mr. Gascogen, Dr. T. Fox, Mr. James Lane, Dr. Meredyth, Dr. Menzies, and Dr. Semple. The Honorary Secretaries read answers sent from several hospitals as follows:—Mr. Gascogen and Mr. James Lane's returns showed that in the Dean-street hospital there was a

daily average of 179 male and 39 female out-patients, and 16 male in-patients. The average number of female in-patients in the female Lock Hospital being 66. In the Lock Hospital of Liverpool the returns gave the number of beds as 50, and the average number of patients in hospital as 45. No out-patients are treated at the Liverpool Lock Hospital. The Dublin Lock Hospital only admits *females* with venereal diseases. A grant from Parliament enables the hospital to maintain 100 beds; there are no out-patients, and the average number of Female in-patients is 86. In a full report sent by Mr. Holmes Coote, it was stated that the total amount of venereal cases seen daily at St. Bartholomew's Hospital was, on an average, 174. Mr. Coote wished it to be understood that the worst cases come from Whitechapel, the Commercial-road, and the East of London; that accommodation for such cases was urgently needed in that quarter, as the wards of St. Bartholomew's were filled with these East-end cases. Average number of venereal cases seen daily in the surgery, 43; in out-patients' room, 44; in the wards, 75; scattered through hospital, 12; total, 174. Sloughing sores have been, according to Mr. Coote, rather frequent of late in St. Bartholomew's Hospital. The severe cases come, for the most part, from the districts east of Finsbury; the women are very poor and dirty; young girls of 12, or even younger, are sometimes in hospital. A vast number of the girls, according to Mr. Coote, are kept and dressed by old women, who take nearly all their earnings; they follow them, watch them when ill in hospital, and dismiss them as soon as they see that they are marked or scarred. The report from Guy's Hospital showed that there was a daily average of 55 venereal in-patients, there being 25 beds for males and 30 for females affected with such diseases. This gave a proportion of venereal cases to the total of surgical cases seen as one to six. No return of the number of out-patients was sent by Guy's Hospital, which was much to be regretted. The report from the Middlesex Hospital showed that there were only 11 beds for venereal patients in that large hospital. No return, unfortunately, was made of the number of venereal patients seen daily. The report by Mr. S. Chater showed that the number of venereal out-patients seen daily at the Metropolitan Free Hospital was, on an average, 20, and that the proportion these bore to the total number of surgical cases seen was as 1 to 3. There were no beds for such cases in the hospital. In Staffordshire General Infirmary there are four male and four female beds for venereal cases, and these are frequently not filled, especially the female ones. The Southern Hospital of Liverpool sends all its venereal cases to the Lock Hospital, and it appears from the report that it has neither in nor out-patients with venereal diseases. The report from Chester Infirmary shows that there are eight beds for female venereal patients, and only an average of two occupants of these beds. Very few venereal cases come to that Infirmary. In Portsmouth Hospital there are 60 beds for female venereal patients only; no venereal out-patients. The importance of the late Government examinations in improving the health of the population, as far as venereal diseases is concerned, was well shown by the two following reports:—The Government Act came into operation in October, and so much has been effected by its means that the report from Assistant-Surgeon Knight from Sheerness Garrison Hospital shows that from 1st January to 22nd March, 1867, there have been only 36 admissions for venereal disease. Aldershot, on the contrary, has not yet enjoyed this sanitary system, and the contrast is well shown in a letter from Mr. Powell, Workhouse Medical Officer of Farnham. According to this gentleman, the average number of female venereal cases in his charge has been for the last three years 22; the average deaths 8 per cent., 15 per cent. having primary sores, and 23 per cent. gonorrhœa, the remainder had eruptions, phthisis, dropsy, &c. The largest number of deaths were from consumption than dropsy. There were two large venereal wards with 18 beds, but at present a fever ward was turned into a venereal ward. No case is refused, and Mr. Powell states that at present there was less than 200 cubic feet of space for each patient. The population of Aldershot is 16,720, of whom 10,000 are military. The Contagious Diseases' Act is soon to be enforced in that spot. The writer expressed his opinion that brothels should be licensed and inspected at Aldershot, and that it should be illegal for beer-house keepers to harbour any notorious prostitutes. He describes the majority of the cases of diseases among the prostitutes there as being chronic and non-infectious.

Mr. JAMES LANE remarked that he could now account for the fact which he had noticed for some years back, that the very worst cases of sloughing phagedæna he ever saw at the Female Lock Hospital came from the Farnham Union.

Mr. CURGENVEN remarked that 200 cubic feet of space only was certain to cause phagedæna.

The PRESIDENT remarked that, with the exception of the reports made by Mr. Coote, Mr. Lane, Mr. Gascogen, Mr. Chater, and from the Lock Hospitals of Dublin and Liverpool, the returns were very incomplete. What the Committee desired to know was, the daily number of venereal out-patients, and the relation this number bore to the total of the surgical cases seen, so as to form an idea of the spread of the disease. The question as to the advisability of extending the principle of the Contagious Diseases' Act of 1866 to the general population was then resumed. The President was of opinion that the certifying of women, when leaving hospital, as free from disease might lead to the encouragement of fornication.

Mr. WEEDEN COOKE observed that an eminent surgeon of his acquaintance was the medical officer to a brothel, and so much good had been done by his inspections that that house was much frequented by persons who heard that disease was unfrequent in it.

Dr. TILBURY FOX remarked that it was not necessary to grant any certificate of health to the prostitutes, as if the Contagious Act was carried out, the very fact of their being seen in the streets would show that they were not diseased, as otherwise they would be in the hospital.

Dr. MENZIES considered that a police registration of all prostitutes would be a most beneficial arrangement.

Mr. GASCOGEN said that such a registration already existed in the form of a blue-book called Judicial Statistics. In this there was given the number of prostitutes in London and other towns (as, for example, about 6000 in London) for the guidance of the police. He contended that prostitution could not be ignored so long as there were so many unmarried men, soldiers, sailors, and of other classes. The present way of hunting down brothels was absurd. An informer, a member of the medical profession, at present made it his business to point out all such places, and inform as to their whereabouts to the police, for which he received a reward in half of the costs. He contended that the police should be allowed to license a brothel, and see that neither the neighbours nor the inmates were annoyed, so long as they remained quiet and retired.

Mr. CURGENVEN thought that certificates should not be granted to prostitutes.

Mr. LANE said it was important that it should be known that there was already a registration of prostitutes.

Dr. C. DRYSDALE had not quite made up his mind whether to recommend that the continental system should be extended to this country in its entirety. It had great advantages, but some great evils. On the one hand it certainly, as in Paris, Nantes, Lyons, and other French towns, much lessened the severity of venereal disease; but, on the other hand, it certainly much curtailed the liberty of the female sex. Women, he thought, had never enough freedom in any country, and having very few occupations by which they could gain a living, were sometimes forced temporarily to exist by prostitution. The French police system, he thought, stamped them too firmly with this passing misfortune, and, as it was well known, that about one-fourth of the prostitutes in this country returned into the ordinary population yearly, he questioned whether registration and police supervision should be *compulsory*, until it had been tried voluntarily, by means of a great addition to the Lock (female) accommodation, and the giving of certificates to those disinfected when free from disease. He quite agreed with Mr. Gascogen, that the police should licence certain houses in retired situations as brothels, the present system was a disgrace.

Dr. CHAPMAN thought that, as far as the army and navy were concerned, the State had a perfect right to enforce any laws which would keep them in health and working order. But he contended that the continental laws for keeping back venereal disease had not been so very successful in their attempts as to warrant us in too closely imitating them. If women had any rights at all, one of them must be the right to their own persons. He thought, too, that the tendency of such legislation was to make prostitution respectable, and as this was quite opposed to all true ideas of social happiness, he thought that they should be most cautious in adopting the system of registration and police supervision of prostitutes, unless no other means should be found of diminishing the extent of venereal diseases.

Dr. T. FOX thought that the public were quite ready to adopt

the Contagious Diseases' Act of 1866, with the exception of the certificate of health to prostitutes.

Mr. LANE said that they might be examined, but no certificate of health granted. Of 200 women lately examined at Woolwich, 85 were found to be diseased.

Dr. BROADBENT, whilst allowing the necessity of being careful in destroying the liberty of women, said that we must also think of protecting the public from disease.

Dr. MEREDYTH contended that prostitutes should not be allowed, as at present, to mix with the general public in theatres and promenades.

Mr. WEEDEN COOKE also complained of the indecency of the prostitutes who rode about in Rotten-row.

Dr. CHAPMAN contended that, as long as prostitution existed, it should be allowed to be seen, not kept quiet, in order that its evils should rouse society to further efforts to diminish the amount.

Dr. SEMPLE wished to know whether it was possible to distinguish gonorrhœa in the female from leuchorrhœa, as this was practically important.

Mr. LANE said it was not; and that gentleman also added that the speculum should be used in all cases of examination of suspected women, or discharges would escape notice which existed at the os uteri.

Mr. WEEDEN COOKE observed that one serious difficulty in police registration and examination lay in the nomadic character of the prostitutes.

Foreign Medical Literature.

SELECTIONS FROM THE *NEDERLANDSCH ARCHIEF VOOR GENEES EN NATURKUNDE*, *Deel* I., 3rde *Aflevering*, Utrecht, 1866.

By WM. DANIEL MOORE, M.D.Dub. et Cantab., M.R.I.A.,

HONORARY FELLOW OF THE SWEDISH SOCIETY OF PHYSICIANS, OF THE NORWEGIAN MEDICAL SOCIETY, AND OF THE ROYAL MEDICAL SOCIETY OF COPENHAGEN; EXAMINER IN MATERIA MEDICA AND MEDICAL JURISPRUDENCE IN THE QUEEN'S UNIVERSITY IN IRELAND.

1. *A case in which a fork was swallowed, and removed by the formation of an abscess in the epigastric region, followed by recovery*, is described by A. H. van Andel, first physician to the Asylum for the Insane at Zutphen, in the *Nederlandsch Tijdschrift voor Genecskunde*, Tweede afdeeling, eerste aflevering, p. 58.

The case was that of a lady, aged 64, who, suffering from melancholy, had, two days before her admission on the 31st of August, swallowed a silver fork. It appeared that she had for some time contemplated suicide, and her intention was, by swallowing a fork, to put an end to her life. She had before been under treatment in the institution, during which period a similar occurrence had taken place with another woman. The fork had in this instance been removed by gastrotomy; soon after the operation the patient died. She had a vivid recollection of this case, and hoped that having once swallowed a fork she also would die after the operation.

In the Institution she acknowledged what she had done, and wished to be operated on. Those living in the house with her also stated that the woman had swallowed a silver fork. On examining the abdominal integuments it was found that the fork was situated in the cardiac portion of the stomach, the points being directed upwards and forwards, while the handle was located somewhat posteriorly in the pyloric portion. The patient felt little pain, but a sensation of pressure and weight in the stomach. Under the influence of rest and the use of easily digestible food she recovered. On the 6th November the points of the fork were no longer felt, but a tumour was observed in the left side of the abdomen, above and to the left of the navel. On the 10th April a superficial projection, pointing towards the integuments, made its appearance upon the tumour, which, up to that time, had been round anteriorly, the integuments being movable over it. On the 3rd May, the patient began to complain of more pain, and the integuments over the tumour were less movable. In the course of the month of May an abscess seemed to be developed in the seat of the projection, at three fingers' breadth from the umbilicus in a sinistral and upward direction, presenting, in the early part of June, the form of a circumscribed redness with swelling of the integuments.

The abscess opened spontaneously on the 9th of June with a very small orifice, whence a small quantity of pus mixed with fluid fæcal matters made its appearance. Through the fistula no part of the fork could be felt; dark brown fœtid fæcal matters were constantly discharged through the opening.

On the 12th of June the four prongs of a fork appeared in two-thirds of their length, in a nearly perpendicular direction to the abdominal wall, in the immediate neighbourhood of the fistula just described, four points having shortly before become visible, while a slight pressure on the integuments was sufficient to bring the fork into view to the above-mentioned length. Careful traction and manipulation showed that the wall of the abscess, which was in direct contact around and between the prongs, hindered the removal of the whole fork. After two incisions along the prongs, the fork was without difficulty brought into view in its integrity. On extraction, the handle was in its whole length covered with dark-brown, soft, fæcal matters. After having been carefully washed, the fork appeared, in consequence of the presence of sulphuret of silver, entirely coated with blackish grey, while in the course of the middle of the handle crystals of phosphate of lime had become attached.

After the removal of the fork, the patient felt much relieved. The fistula was simply dressed and kept clean, and on the 14th July was completely closed. Around it considerable infiltration was perceptible, which gradually diminished, so that the patient entirely recovered from the results of swallowing the fork.

At the close of this communication the author quotes analogous instances of swallowed forks, and shows that in such cases it is best not to be in too great a hurry to have recourse to operative interference, and that an expectant method deserves the preference. As to the route taken by the fork, he believes that it perforated the wall of the stomach after the latter had, by adhesive inflammation, become attached to the colon; that thereupon the perforation of the adherent wall, and subsequently that of the opposite wall of the colon, took place, and that finally the abdominal integuments had been perforated.

2. *Turning by the Knee.*—A proposal to improve the technical proceeding of turning by the lower extremity. By SIMON THOMAS, Professor at Leyden *(Ned. Tijdschrift voor Geneesk.*, i., 1.,

Turning by the lower extremity is almost always effected by one or both feet; this method is generally practised and recommended. In its place the author proposes another, which, in his opinion, presents unmistakeable advantages—namely, *turning by the knee.*

Only in two cases is the foot more easily reached than the knee—viz., in original breech presentation, where there can be no question of turning by the lower extremity; and in head or face presentation, with coming down of one or both feet. Except in these cases, the advantages of turning by the knee are the following:—1. In every case of turning, however the fœtus be situated, and whether the uterus be strongly contracted around it or not, the introduced hand reaches a knee sooner than a foot. 2. In every case of turning we know as surely—more surely or more quickly—where we shall find a knee than where we shall find a foot. 3. The force by which the fœtus is moved acts in every case of turning more advantageously on the lower extremity, when we make it act upon the knee, than when we draw by the foot; and, moreover, we can with greater ease, and in a manner more advantageous for the child, employ great force, when this may occasionally be unavoidable in a case of difficult turning. The proceeding to be followed to reach the knee or knees need not here be given step by step. The numbers given by the author in support of his proposal are the following:—

Cases of Turning.	Number of Cases.	Mothers.				Children.					
		Operated by Simon Thomas.		Operated by other Obstetricians.		Operated by Simon Thomas.			Operated by other Obstetricians.		
		Recovered.	Died.	Recovered.	Died.	Born alive.	Still-born.	Died before delivery.	Born alive.	Still-born.	Died before delivery.
By the knee in shoulder presentation	21	21	—	—	—	15	5	1	—	—	—
By the foot in shoulder presentation	26	12	—	13	1	7	4	1	8	4	2
By the knee in head presentation	13	10	1	2	—	8	2	1	2	—	—
By the foot in head presentation	16	8	5	2	1	7	5	1	2	1	—
Total ...	76	51	6	17	2	37	16	4	12	5	2

[The practice above recommended, of turning by the knee in preference to the foot, was many years ago advocated by the late Dr. Breen of this city, in an essay on the subject, published in the fourteenth volume of the *Edinburgh Medical Journal*, and has also been described by Drs. McClintock and Hardy in their Practical Midwifery. —TRANS.]

Summary of Science.

(Specially Edited and Compiled for the Medical Press and Circular.)

By CHARLES R. C. TICHBORNE, F.C.S.L., F.R.G.S.I., &c.

[THE Editor of this Summary wishes it to be understood that he is not responsible for the ideas, theories, or the correctness of statements made in any of the papers quoted in the compilation.]

ON THE REDUCTION OF NITRIC ACID AND NITRATES BY ZINC.

M. TERREIL *(Bulletin de la Société Chimique)*, shows that the nitric acid is not at once reduced to ammonia by nascent hydrogen, but is always converted first into nitrous acid, and that this reaction, in conjunction with permanganate of potash, may be used as a test for the presence of nitrates in water or in any other solution. He also points out that the estimation of iron by permanganate (M. Margueritte's method) is liable to error, if every trace of the nitric acid is not destroyed, before the reduction of the persalt of iron to a proto-salt (either when brought about by zinc or by a sulphite). Permanganate of potash, according to M. Terreil, completely absorbs binoxide of nitrogen, and transforms it into nitric acid, it also oxidizes nitrous and hyponitric acid.

WATER OF THE DEAD SEA.

This is a favourite subject with continental chemists. M. Terreil *(Comptes Rendus*, tom. lxii, p. 1329), however, has made some analyses that are interesting from the fact, that whilst one gives the physical and chemical properties of this water at the surface, the other is taken at a depth of 300 mètres (about 150 fathoms).

	At the surface.	At 300 metres.
The density.....	1·0216.	1·2563.
Dry saline residue....	27·078.	278·135.

It will be observed that the composition of these waters, from the subjoined analyses, is very different, and that it is not merely a simple matter of concentration. The author aslo gives an analysis of the river Jordan, which is not inserted here.

	Water on the surface.	Water at 300 metres.
Chlorine.....	17·628	174·985.
Bromine.....	0·167	7·093.
Sulphuric Acid.....	0·202	0·523.
Carbonic Acid.....	Traces	Traces.
Sulphuretted Hydrogen	Traces	Traces.
Magnesium.....	4·177	41·428.
Calcium.....	2·150	17·269.
Sodium.....	0.885	14·300.
Potassium.....	0·474	4·386.
Ammonia.....	Traces	Traces.
Aluminium and Iron	Traces	Traces.
Silica.....	0·006	Traces.
Organic Matter.....	Traces	Traces.
	25,709	259,984

RESPIRATION.

M. von Pettenkofer and Karl Voit say that more oxygen is absorbed during sleep than during the day, whilst less carbonic anhydride is given off during the night. During labour a man exhales more carbonic acid and water than during repose (not sleep). But the amount of oxygen absorbed is the same. It appears that during sleep the oxygen is stored up in the body for several hours. The above authors state that there is the same quantity of urea secreted in working as in resting days, showing that the work of the muscles is performed without an increase in the decomposition of albuminoid substances *(notice in Chemical News)*.

SOLUBILITY OF IODINE IN TANNIN, &c.

M. Kollier states that tannin augments the solubility of iodine. One part of iodine is dissolved in 450 parts of water at ordinary temperatures, when the water contains 3·3 parts of tannin, and at a higher temperature, 1 part barely requires 240p. of water, containing a trace of tannin. A solution of sugar dissolves less iodine than pure water.

PRECIPITANTS OF THE ALKALOIDS.

The double iodide of bismuth and potassium precipitates the alkaloids. The antimony-salt acts in the same manner, but is not so satisfactory.

The double chloride of iridium and potassium, (also rodium and potassium) precipitates the alkaloids, particularly strychnine and brucine. To extract the alkaloids from the bismuth salt, it is only necessary to treat the precipitate with an alkali, and to agitate with benzine. The following are, however, almost insoluble in benzine :— Theobromine, morphine, solanine, curarine, narceine, and berberine.

URIC AND KYNURENIC ACID.

G. Meissner proceeds, as follows, to separate these acids, as excreted by dogs. He boils with water and carbonate of baryta, and then filters, crystallizes the barytic kyanurenate from the filtrate, and separates the uric acid from the residue left on the filter, by hydrachloric acid—kynurenic acid appears wholly or partially to obliterate the murexide test for uric acid.

ACTION OF LIGHT UPON CYANIN.

M. Schonbein suggests the use of a solution of cyanin as as photometer. He finds that the depth of colour it takes on exposure to light is in proportion to the actinic power of the light, and that the phenomenon occurs in vacus to the same extent.—*(Foreign correspondent of the Chemical News)*.

PERCHLORIDE OF LEAD.

There exists in the chlorine series a composition corresponding to peroxide of lead Pb. O_2. This substance is a perchloride and shows consequently all the characteristics of similar compounds.

The alkaline chlorides give it stability, it is inclined to unite with ether, and becomes a powerful agent of oxidation.—*N. Nickel.—Journal de Pharmacie.*

NEW PILE. ACTION OF NITRO-MURIATIC ACID ON SILVER, BY M. ROUILLION.

A mixture composed of two-thirds hydrochloric acid, one-third nitric acid, or three-fifths of the first, and two-fifths

nitric acid will dissolve gold or platinum, but does not penetrate pure silver—chloride of silver is only formed on the surface.

This superficial chloride as soon as it is formed becomes a protecting envelope to the remaining silver, and acts as an impervious varnish to the acids of the bath so well, that the silver thus protected can remain for any time plunged in mixture without sustaining injury. That is to say, without the formation of chloride extending beyond its surface. This pile has less strength than Bunsen's, but is more constant. It deserves to be tried against the others in use at the present time.—*(Journal de Pharmacie).*

HIPPURIC ACID AND SUCCINIC ACID IN ANIMAL ORGANISMS.

Dr. Meissner and C. Shepard, in the examination of blood and other animal fluids for hippuric and benzoic acids, where the presence of succinic acid is suspected, rely on the solubility in absolute alcohol of the alkali and calcium salts of hippuric and benzoic acids, the corresponding salts of succinic acid being insoluble. Normal blood, at least that of herbivora, always contains succinic acid, but never contains benzoic or hippuric acids. The hippuric acid found in the urine of herbivora is first produced in the kidneys, and is not simply separated by them from the blood. There is no clue to the nitrogenised substance, which, in the body of the animal, becomes converted into hippuric acid ; whatever it may be, it certainly is not urea. The observation of Lautemann, that quinic acid becomes converted in the human body into hippuric acid, is fully confirmed by these experimenters. Wöhler's early observation, that the administration to human subjects of succinic acid causes an increase both of the normal quantity of that acid in the urine and also of the carbonic acid, without influencing the excretion of hippuric acid, is also fully corroborated.

ON THE PRESENCE OF PROTAGONE IN THE BLOOD.

By M. L. Hermann.

The author has found protagone in blood. It is contained principally, if not exclusively, in the globules, especially in red globules. To obtain it, stir with ether some defibrinated blood, the clot of which divides into small pieces. Let it remain in a jar placed in hot water for some days, stiring it frequently. This operation is repeated several times with fresh ether. On cooling the ethereal liquor at 0°, it should be muddy, if otherwise, the ether is evaporated gently until there is left a considerable crystalline residue. Placed in contact with water this residue swells. The water is drained off, and then it is treated by some cold ether to extract the cholesterine. The residue presents all the properties of Mr. Liebriech's protagone (a substance supposed by him to be the chief constituent of nervous tissue from which cerebrin and myelin are developed. It was prepared by M. Liebriech from brain-substance. Composition C^{116} H^{291} N^{4} PO^{22}. E. S.)

ON THE DINOSAURIAN REPTILES OF SOUTH AFRICA.

Professor J. H. Huxley, in a paper he read before the Geological Society, describes a portion of a right femur twenty-five and a half inches long, so that the entire femur may be safely assumed to have exceeded thirty inches in length. The peculiar form of the bone and the character and position of the trochanters leave no doubt of the Dinosaurian affinities of the reptile to which it belonged, which must have been comparable, in point of size, to its near allies, the Megalosaurus and the Tyuanodon.

VEGETABLE PHYSIOLOGY.

Stomata of Leaves.—M. M. Duchartre and Bossingault allege that the quantity of carbonic acid decomposed by the leaves of plants has no relation to the number or superficial extent of stomata. They further state that in the case of fruits the green parts decompose carbonic acid, and yet contain no trace of stomata, therefore the stomata of leaves are not the breathing organ of plants.

The starchy matter of plants.—A paper laid before the French Academy by M. Arthur Gris, states, as a conclusion, that the amylaceous matter contained in plants is partly resorbed during the development of the flowers ; but that this process is not continued during the development of the fruit.

The diagnosis of the Algæ.—Upon this subject a controversy has been going on for some time past between M. Archer of the Dublin Natural History Society and Dr. Braxton Hicks of London. "The latter contends that there are so many intermediate forms between the earlier and later stages of the development of certain plants, which are in every respect like what Mr. Archer considers adult forms, that diagnosis from the examinations of specimens alone not undergoing development is unsatisfactory."—*(P. Science Review).*

On the maturity of plants.—The author M. A. Beyer's experiments are in connection with the changes which occur in fruits at different periods of their growth.

He has made observations on the changes in the gooseberry from the time of its formation to that of its complete maturity.

These observations refer to the decrease of sugar, in the amount of acid liberated, to the fatty matter, the nitrogen and the ash.

His conclusions are as follows :—As maturity progresses, the proportion of water diminishes and that of solid substances increase. The quantity of sugar always increases, but the first period of maturity the fruit encloses a maximum quantity of free acid. The diminution of which, in the later period, is only perceived when the dry material is examined.

Mineral matter diminishes progressively.

The quantity of nitrogenous matter shows the same changes as that of acid.

The fatty matter continues to increase if the total of the fruit is considered, but if the calculation is made from the weight of the solid substances it has its maximum in the first period, and diminishes afterwards by degrees.

ON THE DÉVELOPMENT OF SMALL ACARI IN POTATOES.

M. Guerin de Menneville exhibited at a late meeting of the French Academy, some specimens of potatoes covered with acari, but which appeared to be perfectly sound. M. G. Menneville remarked that two months of wet weather had produce myriads of acari, known as Tyroglyphus feculæ, on the Australian, and other varieties of potatoe growing on the imperial farm at Vincennes.

THE COMPARATIVE VALUE OF THE HEN AND DUCK EGGS AS NOURISHMENT.—BY M. A. COMMAILLE.

From the analysis made by M. Commaille, the duck has always the advantage, its fertility much greater, its nourishing value more considerable. But the hen eggs, from custom are more agreable to the taste. The white of the duck's, egg is of a blue shade which is not inviting, in the other it is more gelatineus, but in many cooking and useful preparations the duck's eggs advantageously replace those of the hen.

TOXICOLOGY "POISONING BY STRYCHNINE."*

This is a report written by M. M. Tardieu, Lorain, and Roussin, on the occasion of the death of a women named Pegard. They confine themselves to a detail of the chemical analysis of the organs extracted from the corpse, and physiological experiments performed upon living animals, with the products furnished by the analysis of the body. All the organs were perfectly preserved. The experimenters having found out that they contained no mineral substance had recourse to a direct search for the vegetable alkaloids. The stomach and intestines were divided into small pieces, these, together with the liquor contained in the first organ, and the alcohol in which they had been preserved, were introduced into a large glass flask with a fresh litre of alcohol. An alcoholic solution of tartaric acid was poured in, agitating all the time, until the whole exhibited a decided acid re-action. It was then heated to a temperature of 35°C. for 24 hours, agitating frequently. The mix-

*Annales d'hygiene publique et de medécine légale and Journal de Pharmacie.

ture was thrown upon a straining cloth, and the residue treated twice with fresh quantities of alcohol, and finally the liquors were mixed and filtered through paper. Then liquors were afterwards evaporated at a temperature of about 40°.

The syrupy residue procured by the above operation, was diluted with twice its volume of distilled water, and again filtered. A concentrated solution of tannin was then added as long as any precipitate was thrown down, and the deposite separated from the supernatant liquor. The wet tannin precipitated was transported to a porcelain dish, and decomposed with a milk of pure "hydrate of lead." This was treated with alcohol, and after a digestion of an hour it was allowed to deposite. The supernatant liquor was passed through a filter, and the residue treated with a fresh portion of alcohol.

On evaporating the filtrates there remained a residue slightly coloured, of the consistency of honey, alkaline to litmus paper—having a taste partially bitter and partially saline. Some experiments made upon this residue to determine the preseuce of strychnine by the ordinary test for strychnine were without any results. Some physiological experiments were then tried with this residue. Six drops of a solution, prepared by dissolving 5 centigramms of the extract in 3 centimetres of acidulated water, were ingested into the cellulur tissue of the abdomen, and back of a frog.

A similar operation was made on a second frog with a solution of hydrochlorate of strychnine prepared for the purpose. The experimenters observed all the symptoms of poisoning by strychnine in both frogs. Intense tetanic stiffness, contraction of the fore-legs, trembling of the breast, and convulsions of the stomach, and relaxation of the body. After these two experiments they extracted the strychnine from the residue by the following means:—The residue was diluted in 1000 cubes of distilled water, dissolved by three drops of pure hydrochloric acid, and heated at 50°. It was filtered, and then precipitated by a solution of iodide of potassium and mercury. This deposit washed by decantation was then treated by a small quantity of sulphide of ammonium, which determines the formation of an abundant black precipitate of sulphide of mercury. The residue was dried until all sulphurous smell had disappeared, and was then boiled with repeated doses of pure alcohol at 85°, they evaporated to dryness the filtered alcoholic liquors in a dish, and dissolved in some centimetres of acidulated water the white crystalline and very bitter residue. On adding to this solution a slight excess of a concentrated solution of carbonate of potassa, and then five centimetres of chloroform, treating with a second quantity of chloroform, agitating, and again separating, the bitter principal was extracted. The chloroformic solution were then evaporated to dryness at a gentle heat. There remained a residue crystalline, white, and extremely bitter, alkaline insoluble in water and soluble in alcohol. A small quantity of this residue gave an intense violet colour with sulphuric acid, and bichromate of potash, and was not coloured by sulphuric or nitric acid. A solution of the residue in hydrochloric acid gave a yellow crystalline precipitate with chloride of gold, and with chlorine, a cloudy white precipitate. Strychnine was recognised by the above reactions, whilst a hydrochloric acid solution of the crystals prepared from the poisoned woman on injection under the cellular tissue of a frog gave results similar to those of the first experiment.

The following important papers have appeared in the journals and periodicals within the last month:—

"On the Basicity of Tartaric Acid." By W. H. Perkins.

"On the Tritration of Compound Ethers." By J. Wanklyn.

Both these papers appear in the journal of the Chemical Society for March. Prof. Wanklyn estimates the compound ethers by digesting them at a moderate temperature with an excess of a standard solution of potash, and then estimating the excess of caustic potash left. The difference shows the amount of compound ethers present. Most of the ethers are, according to Prof. Wanklyn, easily decomposed. Mr. Herbert McLeod, in the same journal, describes a new form of aspirator. The advantages of this aspirator consists in an arrangement by which the quantity of gas can be measured.

"On Vapour Density." By M. Cahours Comptes Rendus. LXIII. 14.

M. Deville, on the same subject, p. 18.

In the *Bulletin de la Société Chimique*, for February, will be found five papers from the pen of the indefatigable M. Berthelot, including one "On a New Mode of Making Oxalic Acid, and its Homologues." This consists in acting upon acctylene by permanganate of potash.

M. Wurtz, in the same journal, describes a new class of "Compound Ureas and Compound Ammonias."

Cosmos, of the 16th January, contains an interesting account of M. Gaffield's "Experiments on the Action of Solar Light upon Coloured Glass."

M. Siemens and Dr. Wheatstone have, within a few days of each other, communicated papers containing most important observations, which are almost exactly similar. It is frequently the case that some of our most valuable discoveries are thus simultaneously brought forward by different observers.

M. Siemens' paper is termed "On the Conversion of Dynamical into Electrical Force without the aid of Permanent magnetism."—Received February 4th, 1867.

Prof. Wheatstone's is "On the Augmentation of the Power of a Magnet by the reaction thereon of currents induced by the Magnet itself."—Received February 14th.

In the latter note the author says, "I intend to show that an electro-magnet, if it possess at the commencement the slighest polarity, may become a powerful magnet by the gradually augmenting currents which itself originates.

M. Stas' papers, in connection with the atomic weights, &c., are being translated in the *Chemical News*. The present memoir is "On the determination of the Quality of Silvers prepared by different methods."

METEOROLOGY OF MARCH, 1867.

The past month has presented a series of phenomena of a more than usually interesting nature, besides which its severity has been greater than has been experienced for upwards of half a century. An analysis of the weather during so inclement a period, cannot but interest the profession, forming as it does a point from which may be viewed the prevailing diseases of the season.

Mr. R. H. Allnatt, whose labours we have on a previous occasion referred to, has published an epitome of his daily observations taken on the south-west coast of England, from which we extract the following paragraphs:—

Cloud.—The cloud modifications of the month were not greatly varied, nor did they assume the beautiful forms and gorgeous hues which sometimes characterize violent atmospheric fluctuations. The predominant combination was that of the cirro-cumulo-stratus, true rain-cloud, or nimbus, which existed on twenty days. No day was purely clear and cloudless, but the sun shone almost without intermission on three or four occasions which are marked by light cumlus, or cirro-cumulus.

Wind.—Violent and disastrous gales sometimes attained the force of hurricanes. On the 1st, a strong N.E. or polar wind blew until the morning of the 5th, when it moderated under the adverse conditions of decreased atmospheric tension and increased temperatures. On the 12th a cold high paroxysmal N.E. wind sprang up, and continued, with one day's intermission, till the 17th, on the evening of which it gathered strength and burst into a tremendous hurricane, which culminated on the 18th at six A.M., after which it gradually died away, having produced a series of wrecks along the line of the British coasts. On the 21st, at 8 P.M., another polar gale raged, of sufficient force to cause disasters at sea, and continued till the early morning of the 20th, when it was succeeded by heavy rainfall, great increase of temperature, atmospheric saturation, and a dead calm. On the evening of the 24th a high squally wind came from S.W., which persisting a few hours, ended in heavy

rainfall. The following day, the 25th, a strong equatorial gale visited the Irish coasts, and accounts again reached us of casualities at sea. These high gales were interspersed with minor winds of mitigated force, which on several occasions sprang up at midnight and died away in the early morning.

Barometer.—Throughout the violent atmospheric vicissitudes of the month the barometer maintained considerable steadiness of action. Its range was from 29·25in. to 30·75in., which is exactly one inch and a-half. The diurnal oscillatations were frequent, but generally limited in extent. Once in the twelve hours on the 17th atmospheric tension diminished upwards of 4-10ths, but this was an isolated case, and was by far the largest amount of variation within so limited a period which occurred during the month. It coexisted with wind and heavy rainfall.

Thermometer.—The unseasonable amount of cold which prevailed at intervals in the western parts of England, and the comparative immunity of the eastern portions, have suggested an important solution in the possible deflection of the Great Gulf stream and the impact of the Arctic current. The latter effect may perhaps have been produced by the impediment offered to its usual channel by icebergs of unwonted magnitude in the Arctic regions, which, by diverting the current, threw it upon the western coasts. In the absence of demonstrative facts the theory is, at all events, plausible.

From the 1st to the 7th, inclusive, the day temperature ranged from 34 to 40 deg., making a variation of 6 deg., and the night from 29 to 35 deg., constituting also a difference of 6 deg. Mean day, 33·4 deg.; night, 31·1 deg. The night temperature was therefore 2·0 deg., and the day 4 deg. below their acknowledged means.

From the 8th to the 14th the day temperature ranged from 31 to 38 deg., and the night from 28 to 30 deg. The mean day rose to 37·1 deg., and the night to 35 deg., which is still considerably below the recognised average.

From the 15th to the 21st day temperature varied from 34 to 38 deg. The mean was 35·4 deg.; 5 deg. below the standard. The night ranged from 28 to 33 deg., the mean being 33, or exactly corresponding to the average nocturnal value.

From the 22nd to the end of the month temperatures increased, and registered 1 deg. above the average.

Rainfall.—The amount of water from heavy rains and widespread snowstorms has been enormous, and will, it is computed, gauge for the whole area of England an excess little short of 4in. March is generally a dry month, the mean rainfall being a fraction only above 2in. Last year there was a deficiency of 0·18in. In the past month the fall has been 5·17in., which exhibits an excess of 3·09 in. above the usual average. This, be it remembered, is the computation on the S.W. coast, where comparatively little snow falls, but in the north and in some districts still further west it attained an immense depth. In Bristol, for instance, Dr. Burder states that the combined amount from successive snow falls measured 8in. It is therefore a very moderate calculation which sets the gross excess of the month at 400 tons per acre for the whole of England.

Ozone.—The deficiency of this allotropic agent is remarkable, and has persisted more or less for some months. From the 25th, however, as will be seen by the table, the ozonoscopes have manifested signs of returning reaction.

Hygrometer.—The hygrometric conditions of the air were, of course, influenced by the persistent rainfalls, but they, nevertheless, maintained a fair average balance of dryness. On three days complete saturation occurred.

Thus it will be seen that the past month has been remarkable for its high persistent winds, low atmospheric temperature, and excessive rainfall.

THE BRITISH PHARMACOPŒIA—I.

The new edition of the Pharmacopœia, which is so soon to be issued, has been several times alluded to in our columns, and some of its most important and novel features pointed out. As we shall, however, have to enter with considerable particularity into the work, we commence a series of reports upon it before it is actually in the hands of the Profession. This, we believe, will be found a convenience to many of our readers, and enable them, on its publication, the more readily to familiarize themselves with the work which will henceforth enter so largely into the daily routine of their professional employment. Changes in abundance they will find—many of them great improvements—some with which they will be disposed to find fault—others apparently useless. It is desirable that as soon as the work is published it should become the only authority, and therefore such changes must at once be accepted.

We are glad that no alteration has been made in the weights and measures since the former edition. It is, however, a valuable feature of the work that some of the formulæ are so arranged that they may be prepared with English grain weights and measures, or according to the French metrical system.

The most important point to the general practitioner and student is at once to become familiar with the changes of nomenclature that have been adopted, and in order to assist in this we give in full the tables which show these alterations:—

Substances included in the Present Edition of the British Pharmacopœia, but not in the Pharmacopœia of 1864.

[Those printed in italics were included in one or more of the Pharmacopœias of London, Edinburgh, and Dublin.]

Acetum Cantharidis. (Lond.)
„ *Scillæ.* (Lond., Ed., Dub.
Acidum Carbolicum.
Adeps Benzoatus.
Amygdala Amara.
Atropiæ Sulphas.
„ Sulphatis, Liquor.
Bismuthi Carbonas.
Bismuthi et Ammoniæ Citratis, Liquor.
Cadmii Iodidum.
„ Iodidi, Unguentum.
Canellæ Albæ Cortex. (Lond., Edin., Dub.)
Cerii Oxalas.
Charta Epispastica.
Collodium Flexile.
Confectio Opii. (Lond.)
Decoctum Ulmi. (Lond.)
Emplastrum Cerati Saponis.
Essentia Anisi. (Dub.)
Essentia Menthæ [Piperitæ. (Dub.)
Extractum Lactucæ. (Lond.)
„ Mezerei Ætherium.
„ *Papaveris.* (Lond., Edin.)
„ *Pareiræ.* (Lond., Edin.)
„ Physostigmatis.
Glycerinum Acidi Carbolici.
„ „ Gallici.
„ „ Tannici.
„ Amyli.
„ Boracis.
Infusum Aurantii Compositum. (Lond.)
„ *Gentianæ Compositum.* (Lond.)
Limentum Potassii Iodidi cum Sapone.
„ Sinapis Compositum.
Liquor Ammoniæ Acetatis. (Lond., Edin.)
„ „ *Citratis.* (Lond.)
„ Arsenici Hydrochloricus.
„ Bismuthi et Ammoniæ Citratis.
„ Ferri Perchloridi.
„ *Hydrargyri Perchloridi.* (Lond.)
„ Lithiæ Effervescens.
„ Magnesiæ Carbonatis.
„ *Morphiæ Acetatis.* (Lond., Dub.)
Liquor Potassæ Effervescens. (Lond. 1836.)
„ *Sodæ Effervescens.* (Lond. 1836.)
„ *Zinci Chloridi.* (Dub.)
Lotio Hydrargyri Nigra.
Mistura Sennæ Composita.
Mistura Spiritus Vini Gallici. (Lond.)
Morphiæ Acetas. (Lond., Edin. Dub.)
„ *Acetatis Liquor.* (Lond., Dub.)
Oleum Sinapis.
„ Theobromæ.
Ovi Vitellus. (Lond.)
Oxymel Scillæ. (Lond.)
Physostigmatis Faba.
Pilula Aloes et Ferri. (Edin.)
„ *Conii Composita.* (Lond.)
„ *Ipecacuanhæ cum Scillâ.* (Lond.)
Pulvis Opii Compositus.
Pyrethri Radix. (Lond., Edin.)
„ Tinctura.
Sodæ Citro-tartras Effervescens
„ *Sulphas.* (Lond., Edin., Dub.)
Spiritus Ammoniæ Fœtidus. (Lond., Edin., Dub.)
Spiritus Vini Gallici. (Lond.)
„ „ „ *Mistura.* (Lond).
Sulphuris Iodidum. (Lon. Dub.)
„ *Iodidi, Unguentum.* (Lond.)
Sumbul Radix.
„ Tinctura.
Suppositoria Hydrargyri.
„ Plumbi Composita
Syrupus Rhamni. (Lond., Ed.)
Tinctura Chloroformi Composita.
„ *Cubebæ.* (Dub.)
„ *Ferri Acetatis.* (Dub.)
„ *Opii Ammoniata.* (Ed)
„ Pyrethri.
„ *Quassiæ.* (Edin.)
„ Sumbul.
„ Veratri Viridis.
„ Zingiberis Fortior.
Trochisci Ferri Redacti.
„ Ipecacuanhæ.
„ Potassæ Chloratis.
„ *Sodæ Bicarbonatis.* (Edin.)

Unguentum Cadmii Iodidi.	Vapor Acidi Hydrocyanici.
„ Hydrargyri Compositum.	„ Chlori.
„ *Pisis Liquidæ.* (Edin., Dub.)	„ Coniæ.
„ *Plumbi Iodidi.* (Lond.. Dub.)	„ Creasoti.
„ Potassæ Sulphuratæ.	„ Iodi.
Unguentum *Sulphuris Iodidi.* (Lond.)	Veratri Viridis Radix.
	„ „ Tinctura.
	Vinum Aurantii.
	„ Ferri Citratis.
	„ Quiniæ.
	„ *Rhei.* (Dub., Edin.)

Substances included in the British Pharmacopœia of 1864, *but omitted in this Edition.*

Catechu Nigrum.	Spiritus Pyroxylicus Rectificatus.
Cocculus.	Unguentum Cocculi.

Substances the Names of which have been Altered.

Present Names.	Names in the Edition of 1864.
Acaciæ Gummi	Acacia.
Aconiti Folia	Aconitum.
Ammonii Chloridum	Ammoniæ Hydrochloras.
Amygdala dulcis	Amygdala.
Anethi Fructus	Anethum.
Anthemidis Flores	Anthemis.
Antimonium Nigrum	Antimonii Sulphuretum.
Armoraciæ Radix	Armoracia.
Arnicæ Radix	Arnica.
Belæ Fructus	Bela.
Belladonnæ Folia	Belladonna.
Bismuthi Subnitras	Bismuthum Album.
Buchu Folia	Bucco.
Calumbæ Radix	Calumba.
Capsici Fructus	Capsicum.
Carui Fructus	Carui.
Cascarillæ Cortex	Cascarilla.
Cassiæ Pulpa	Cassia.
Cinchonæ Flavæ Cortex	Cinchona Flava
Cinchonæ Pallidæ Cortex	Cinchona Pallida.
Cinchonæ Rubræ Cortex	Cinchona Rubra.
Cinnamomi Cortex	Cinnamomum.
Colocynthidis Pulpa	Colocynthis.
Conii Folia	Conium.
Coriandri Fructus	Coriandrum.
Cuspariæ Cortex	Cusparia.
Digitalis Folia	Digitalis.
Emplastrum Plumbi	Emplastrum Lithargyri.
Ferri Peroxidum Humidum	Ferri Peroxidum Hydratum.
Ferri Peroxidum Hydratum	Ferri Peroxidum.
Filix Mas	Filix.
Fœniculi Fructus	Fœniculum.
Gentianæ Radix	Gentiana.
Glycyrrhizæ Radix	Clycyrrhiza.
Granati Radicis Cortex	Granati Radix.
Hæmatoxyli Lignum	Hæmatoxylum.
Hemidesmi Radix	Hemidesmus.
Hydrargyri Perchloridum	Hydrargyri Chloridum.
Hydrargyri Subchloridum	Calomelas.
Hyoscyami Folia	Hyoscyamus.
Kamala	Kamela.
Krameriæ Radix	Krameria.
Laurocerasi Folia	Laurocerasus.
Liquor Ammoniæ Acetatis Fortior	Liquor Ammoniæ Acetatis.
Liquor Antimoniæ Chloridi	Liquor Antimonii Terchloridi
Liquor Cantharidis	Linimentum Cantharadis.
Liquor Ferri Perchloridi Fortior	Liquor Ferri Perchloridi.
Maticæ Folia	Matica.
Mistura Gentianæ Composita	Infusum Gentianæ Compositum.
Nectandræ Cortex	Nectandra.
Oleum Myristicæ Expressum	Myristicæ Adeps.
Papaveris Capsulæ	Papaver.
Pareiræ Radix	Pareira.
Pilula Hydrargyri Subchloridi Composita	Pilula Calomelanos Composita.
Pilula Saponis Composita	Pilula Opii.
Piper Nigrum	Piper.
Plumbi Oxidum	Lithargyrum.
Podophylli Radix	Podophyllum.
Potassæ Prussias Flava	Ferrocyanide of Potassium.
Pterocarpi Lignum	Pterocarpus.
Pulvis Ipecacuanhæ Compositus	Pulvis Ipecacuanhæ cum Opio
Pulvis Kino Compositus	Pulvis Kino cum Opio.
Quassiæ Lignum	Quassia.
Quercus Cortex	Quercus.
Rhei Radix	Rheum.
Rhœados Petala	Rhœas.
Rosæ Caninæ Fructus	Rosa Canina.
Rosæ Centifoliæ Petala	Rosa Centifolia.
Rosæ Gallicæ Petala	Rosa Gallica.
Sabinæ Cacumina	Sabina.
Sambuci Flores	Sambucus.
Sanguisuga Medicinalis	Sanguisuga Officinalis.
Sanguisuga Officinalis	Sanguisuga Medicinalis.
Sarsæ Radix	Sarsa.
Sassafras Radix	Sassafras.
Scoparii Cacumina	Scoparius.
Senegæ Radix	Senega.
Serpentariæ Radix	Serpentaria.
Soda Tartarata	Sodæ et Potassæ Tartras.
Tabaci Folia	Tabacum.
Taraxaci Radix	Taraxacum.
Ulmi Cortex	Ulmus.
Unguentum Zinci	Unguentum Zinci Oxidi.
Uvæ Ursi Folia	Uva Ursi.
Valerianæ Radix	Valeriani.

*Preparations the Composition of which has been Altered.**

Acidum Nitricum.	Spiritus Cajuputi.
Alumen.	„ Juniperi.
Alumen Exsiccatum.	„ Lavandulæ.
Decoctum Aloes compositum.	„ Menthæ Piperitæ.
Infusum Gentianæ compositum.	„ Myristicæ.
Linimentum Crotonis.	„ Rosmarini.
„ Terebinthinæ.	Suppositoria Acidi Tannici.
Liquor Ammoniæ Acetatis.	„ Morphiæ.
„ Ferri Perchloridi.	Trochisci Bismuthi.
Mistura Ferri Compositi.	„ Catechu.

Substitution.

Pulvis Cinnamomi compositus (Pulvis Aromaticus, *Edin.*) } subtituted for { Pulvis Aromaticus.

* Minor alterations are not included.

REFORM OF THE SANITARY LAWS.

An influential deputation from the Council of the National Association for the Promotion of Social Science waited, by appointment, on his Grace the Duke of Marlborough, at the offices of the Privy Council, on Tuesday, the 2nd inst., with the object of representing to his Grace the difficulties and anomalies which at present attend the carrying out of the various acts in relation to Public Health. The deputation consisted of Sir J. K. Shuttleworth, Bart.; Mr. Layard, M.P. ; Colonel Sykes, M.P. ; Dr. Rumsey, of Cheltenham ; Mr. Charles Hawkins, Dr. Lankester, Mr. James Beale, Dr. Rendle, Dr. Stewart, Dr. Archibald H. Jacob, of Dublin ; Mr. T. H. Gell, Dr. Hardwicke, Captain Clode, Mr. A. Pocock, and the Rev. W. L. Clay, Secretary. The deputation was received by the Duke of Marlborough, Lord Robert Montague, and Mr. Simon, Medical Officer to the Privy Council. On the introduction of the deputation, Dr. Rendle stated to his Grace the objects which the deputation had in view. His remarks were followed by able statements from Dr. Rumsey, Dr. Lankester, Mr. James Beale, and Dr. Stewart. We regret that the great demand on our space obliges us to withhold our *resumè* of their observations till next week :—

Memorial to His Grace the Duke of Marlborough, Lord President of Her Majesty's Most Honourable Privy Council. From the Council of the National Association for the promotion of Social Science.

The Council of the National Association for the promotion of Social Science desires to submit to your Grace the following considerations respecting an amendment and consolidation of the laws relating to Public Health.

These laws are numerous and diverse; and as different subjects of legislative interference arise from year to year, become more complex and more difficult to interpret and apply.

Some of the enactments are general, some local. The provisions of the latter are often of universal value and applicability, and might beneficially be introduced into the former. In other instances there are different enactments relating to the same cases, with different penalties for the same offences. For instance sec. 63 of "The Public Health Act, 1848," and sec. 2 of "The Nuisances Removal Amendment Act," 26 and 27 Vict. c. 117, intended to prevent the sale of diseased meat, and collateral in their operation, impose a penalty, the one of £10, the other of £20, in precisely similar cases. This of necessity leads to confusion.

Some important enactments are permissive; indeed this principle very extensively pervades sanitary acts of the greatest importance, and consequently they are seldom acted upon. For instance, sec. 22 of "The Nuisances Removal Act, 1855," where, when ditches, &c., are a nuisance, it is left to "the opinion of the local authority" to decide whether the nuisance requires a sewer for its abatement; and secs. 23 and 24 of "The Sanitary Act, 1866," relating respectively to the provision of means for disinfection, and of carriages for the conveyance of persons sick of infectious disorders; sec. 27 of the same act, and sec. 81 of "The Public Health Act, 1848," concerning the establishment of places for the reception of dead bodies; and sec. 52 of "The Public Health Act, 1848," with reference to compelling a proper provision of closets in factories, are all permissive.

The bodies appointed to administer Health Laws are not always identical, as it is evidently expedient that they should be. There are natural connections which ought not to be disregarded—*e.g.*, the supply of water with the removal of waste; the large with the small means of drainage. These are under diverse authorities. Without bodies of more general and uniform powers, wider districts, and highly qualified Officers of Health precluded from private practice, Health Laws cannot be made fully successful in their operation. "The Sanitary Act, 1866," constitutes sewer authorities, differing in some respects from local authorities under other statutes. The Common Lodging Houses Acts are committed to the management of the police in the metropolis, to Local Boards of Health, to Town Commissioners and Justices in other places. The appointment of analysts rests with the Court of Quarter Sessions in counties, and with the Town Council in boroughs having a separate peace jurisdiction, instead of with the usual authorities for sanitary purposes. Further, this most important appointment is seldom made, as the law merely gives a permission to appoint.

The local authorities are more or less unlearned, and for that reason require plain and specific directions. They are interested in diminishing the rates, unmindful of the probable costliness of their parsimony; and they are, therefore, frequently unwilling to act in sanitary matters, except under compulsion. They are often ignorant of the importance of sanitary precautions, and indifferent to flagrant nuisances, and to the serious consequences arising therefrom to individuals, to others beyond the offending district, and to society at large. Hence the need of a special and central department to stimulate an unwilling or inefficient local authority, to act as a Court of Appeal, to diffuse to all the knowledge obtained from districts that have no connection with each other, to protect individuals and minorities against injustice, and, being possessed of the highest practical knowlege, to construct or sanction bye-laws and local regulations.

The Building Acts, which should at least contain sound rules for insuring due attention to health in the erection of habitations, are very deficient indeed in this point of primary importance. In some few places bye-laws are even now made to serve the purpose. It is undeniable that without some very uniform and stringent additions and alterations to Building Acts (such as that which is now being promoted by the Metropolitan Board of Works), the construction of healthy dwellings, especially for the poorer classes, acknowledged to be required on a very large scale indeed, will most deplorably fail; and the new tenements will doubtless be as bad as the old, or even worse.

The sale of unwholesome and adulterated food calls for very serious attention, and for a much more efficient law. The present law is full of difficulties and defects, is much complained of, and is almost inoperative.

While, therefore, the Acts remain so complicated and multifarious, as are those now in force, it is impossible to hope for an efficient sanitary administration; especially as the principles underlying all true sanitary law are the same, more or less applicable in the same way in all places.

On these grounds the Council earnestly submit, for the favourable consideration of the Government—

1. That the laws of Public Health require to be revised and consolidated with plain and specific enactments on sanitary matters.
2. That permissive enactments are generally taken to be permissions not to act, and that therefore the most useful provisions should be made peremptory.
3. That the constitution of sanitary authorities should be more uniform; their areas of administration more extensive; their powers and functions more comprehensive; and that some provision be made for the addition of members possessing other and higher qualifications than those now required.
4. That the inefficiency in the administration of the Health Laws by the local authorities is in part due to the absence of a central power, which could be appealed to without reference to the courts of law, and could by means of judicious advice, and, if necessary, by legal compulsion, cause the local authorities to do their duty.

International Medical Congress.—The Central Committee of the International Medical Congress to be held at Paris this year, being anxious for the participation of the largest number of foreign members of the Profession, have taken active steps for the organisation of delegations from all parts of the world. The Congress will commence its sittings on the 16th of August, under the auspices of the Minister of Public Instruction, and it is anticipated that the occasion will be taken by a large number of the Profession in Great Britain to visit France. In each important district a corresponding delegate has been appointed to receive the names of those gentlemen who propose being present or contributing to the transactions of the Congress. In Dublin Dr. Kidd and Dr. Archibald H. Jacob have been selected, and in Birmingham Dr. B. W. Foster, and any information in reference to the Congress will be afforded by these gentlemen, or by the General Secretary, M. Le Docteur Jaccond, 4, Rue Drouot, Paris. Members of the profession in France are subject to a subscripton of twenty francs, which is remitted in the case of all others.

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The Medical Press and Circular.

"SALUS POPULI SUPREMA LEX."

WEDNESDAY, APRIL 10, 1867.

MR. BAKER BROWN AND THE OBSTETRICAL SOCIETY OF LONDON.

The recommendation of the Council of the Obstetrical Society of London for the expulsion of Mr. Baker Brown from its ranks on account of "the published matters in relation to clitoridectomy," was brought under discussion in the Society on Wednesday evening last. The suggestion has been adopted, and Mr. Baker Brown is no longer a member of the Society. This result was not outside our anticipation, because the decisive course which the Council adopted indicated a strong belief on their part that they would be supported in it by a majority of the members. The Society has decided, and Mr. Brown has been expelled. A minority of 38 members have recorded their opinions in Mr. Brown's favour and against the Council, and though more than two-thirds of those present have stigmatized him, still the fact remains that the condemnation is by no means unanimous, and that many voices have been raised, if not in approval of his acts, in protest against the truth of the accusations or the interpretation attached by the Council to them. The evidence has been heard, the case discussed, and the verdict recorded, and we are thus at liberty to enter briefly into a *resumè* of the charges made against Mr. Brown as published by the Council, and of his defence lately circulated by himself. We feel the less difficulty in contrasting these two documents, because they assume the form of *ex parte* statements; one of accusation, *soi disant* unprejudiced, the other in defence, avowedly one-sided. The Council have pressed into their service not only plain statements and unvarnished facts (the only evidence, in our opinion, on which the case should have been decided), but individual *dicta*—extracts from lectures, and even long leading articles, whose only effect towards the finding of a verdict, was to parade the accusations, ignore the defence, and prejudge the conclusion. To eighteen pages of such matter the Council add a summing up of their case, as broad an appeal for support of their policy and the condemnation of Mr. Brown as any lawyer's address to a jury, and wind up with a threat that a contrary vote would be considered a want of confidence, and with the matter-of-course disclaimer of personal hostility. Mr. Brown's manifesto endeavours to answer each paragraph *seriatim*, with what success we shall presently show, and concludes with a repartee on his own side.

Now we do not wish to follow the example of either Mr. Brown or the Council, and we believe we give expression to the general feeling when we say that this way of treating the question is not the right one. When we were promised the published matters on which the Council grounded their recommendation of expulsion, we expected to receive a simple record of Mr. Brown's acts and statements, and of the considerations which proved those acts infamous, and those statements false. The Profession have nothing to do, except in their private capacity, with letters or lectures, least of all with leading articles which should have been neither written nor quoted. We can compare, without regret, our own demand for a fair trial, studiously suppressed by the Council, and reproduced by Mr. Brown, with the wholesale condemnation dealt out by our contemporaries in advance of the legitimate enquiry, none of which occupy a fitting place in a just indictment, and we conceive that by adopting this line of argument the Council have merged their dignity as accusers in their new function as prosecutors.

The parallel extracts we have selected with much care, eliminating any matter on either side not absolutely relevant to the facts. We have simply to search for a proof of the charges, and to estimate their gravity as against so severe a punishment as that inflicted on Mr. Brown. We append to each charge the "printed matters" put forward by the Council in respect to it, and in the parallel column Mr. Brown's reply. Three substantial charges are made:

Firstly—"That clitoridectomy has been performed by Mr. Baker Brown on married women without the knowledge and consent of their husbands, and upon both married and unmarried women without their own knowledge of the nature of the operation."

Letter of Dr. West, published Dec. 15, 1866.	*Mr. Baker Brown's Answer.*
"I know a lady, aged 53, whose youngest child was more than 20 years old, who had suffered from a painful fissure of the anus, for which she underwent the usual operation of dividing the mucous membrane of the ulcer. The surgeon who did this, without saying one word to the lady or to her husband, or hinting in any way what he was about to do, cut off her clitoris. In answer to her inquiries why some other operation had been performed in addition to that which she knew was requisite, she at length learned what had been done; and further,	"I entirely deny operating upon this patient without *her* cognizance. She had been under treatment for some seven years. The clitoris was cut away by her express sanction—she binding me to secresy both from her husband and her medical attendant—for, although she may not have been acquainted with either '*the name or nature of the vice to which she was addicted*,' yet she confessed that she was in the habit of rubbing the clitoris and labia. Moreover, the nurse can attest that she even continued this practice after the operation. That the ope-

had the humiliation of discovering that the justification was that she was assumed by the surgeon to be addicted to a vice with the very name and nature of which she was alike unacquainted."

Letter of James Paget, Esq., to Dr. West.

"The passage from your lectures which you propose to send for publication in THE LANCET is exactly true. With part of the facts I was personally acquainted; the rest are related just as they were stated to me by the husband of the patient, and by her usual medical attendant, who was present when her clitoris was removed, but was not consulted about the propriety of the operation. Both these gentlemen are well known to me, and are of unimpeachable integrity."

Evidence of Mr. Peaty in case of Hancock v. Peaty.

"I had been told that she had attempted to poison herself, and I consented to let her go to Dr. Sutherland. I agreed to pay fifty guineas a-year for her board, and four of her sisters agreed to make up the difference. I cannot say whether she was really mad or not. Speaking conscientiously, I should say not; but she was certainly strange, and I have had no experience of mad people. I never gave the smallest sanction to her being taken to Mr. Baker Brown's establishment, and I am even now in the dark as to what the operation was that was performed upon her. I wrote a most passionate letter to her sister complaining of her being subjected to such barbarous treatment.

Letter of Mr. Baker Brown, Dec. 1, 1866.

"In the case of women of mature age, married or unmarried, I have yet to learn that an operation may not be performed, if thought necessary, for the well-being of the patient without consulting her friends, if it be her expressed wish that it should be kept secret."

ration has done her good, even at this distance of time, is clear, from a report I heard but three or four days ago to the effect that, whereas before she was a confirmed invalid, now she goes about in comparative health.

"I now regret that I was induced to keep the husband in ignorance of the cause which led me to operate; but it must be remembered my position was an awkward one. When a patient has put implicit confidence in her medical attendant, and has made most painful revelations, and then begs for secrecy, it is next to impossible to refuse attention to her plea; though experience makes you feel that, should she on any subsequent occasion find it necessary to screen herself, she may unhesitatingly make a 'scapegoat' of her best friend."

Mr. Brown's answer.

"Mrs. Peaty was brought home by her sister, she had extreme hysteria and a mind evidently weakened, though in my opinion she was not actually insane. I explained the cause of her illness, and the nature of the operation, and then with her and another sister's full concurrence, did operate. During the whole of this time I never saw or heard of her husband, nor did I afterwards ever have any communication directly or indirectly with him. If it be asserted that I ought to have known that she was at the time insane, surely when her husband was not aware of his wife's insanity at the date of her marriage with all his opportunities of intimacy with her, I can be excused by my lesser opportunities of knowing her."

Is it customary, when a married woman calls on a practitioner, with some venereal disease, to acquaint the husband with her fault; or, if a married woman comes to you with uterine disease, is it customary to ask the husband for permission before the speculum is used and the caustic applied? But my statement extended not only to married but to unmarried women of mature age, and did not apply so much to *husbands*, as to friends and relations generally.

Second charge—"That Mr. BROWN amputated the clitoris entirely on his own responsibility, and without the concurrence of the patient's ordinary medical attendant who was, notwithstanding, present at the operation."

Letter of Mr. Brown, Dec. 22, 1866.

"When I operated in the presence of her own medical attendant, I did so entirely on my own responsibility, without communicating to him my strong reasons for so doing or in any way making him a participator in the operation."

Mr. Brown's Defence.

In all my operations, I never shirked, and I never will shirk, taking the entire responsibility. In my opinion, a consulting surgeon is bound to do so, having regard both to the welfare of the patient and the position of the practitioner.

Third charge—That Mr. BROWN stated falsely that the London Surgical Home "was not open for the reception of females of unsound mind," while, at the same time, the Reports, and Mr. BROWN himself recorded the admission of cases of "incipient suicidal mania, acute nymphomania, epilepsy with dementia," &c.

Letter of Commissioners in Lunacy to Mr. Brown,

"January 3rd, 1867.

"SIR,—I am directed to transmit for your perusal the enclosed copy of a paragraph which appeared in the *Times* newspaper of the 15th ultimo: —

"The Commissioners will now be glad to hear from yourself, as Senior Surgeon of the Home, whether there is any and what mistake in the paragraph, or on the part of the House-Surgeon, as to the objects of the Home; and, if any mistake has arisen, whether you have taken, or intend immediately to take any, and what steps to disabuse the public mind upon the subject of this apparent violation of the Lunacy Law.

"The paragraph in the *Times* above referred to, and headed THE LONDON SURGICAL HOME, contained the following:—'A peculiar feature of the Home is, that, in addition to the ordinary maladies which come under the head of surgical diseases, women are received who are of unsound mind, provided that their infirmities are not hereditary or of a long duration previous to their application for admission. In it the great experiment is being made for the first time of endeavouring to cure mental diseases by surgical operations.'"

Mr. Brown's reply to the Commissioners.

"136, Harley-street, Cavendish-square, W.,

"January 10th, 1867.

"SIR,—I have no hesitation at once in stating, as Senior Surgeon and founder of the London Surgical Home, that the institution is not open for the reception of females of unsound mind, and in no papers or advertisements issued or published by authority has it ever been stated so. During last year, one patient, a servant of ———, was taken in as suffering from hysteria. I immediately discovered she was of unsound mind, and, as quickly as possible, had her removed to Hanwell Asylum.—I am, etc., "I. B. BROWN.

"Charles Palmer Phillips, Esq."

Extract from Speech of Mr. Brown, in Report of the Surgical Home, for 1864.

"Two or three years ago I mentioned here that I thought we had discovered a fact so startling that it almost made one afraid to thing of it. I stated that we thought we had discovered a cure for a class of suffering hitherto regarded as perfectly hopeless. I did not allude to the particular class of disease then, but I may mention it now. It comes under the head of Epileptic Fits and Hysterical Mania. We have had many cases brought here, which have been almost without exception

Mr. Brown's Defence.

"In relation to the correspondence with the Commissioners of Lunacy, I here repeat that, if I had been called before the Council to explain, I could have satisfied any disinterested parties that there was no want of veracity on my side, and no desire to suppress the truth. ... ... The London Surgical Home is no more than any other hospital in London open for the reception of persons of unsound mind, and therefore is not and never has been advertised as such by the authorities of the hospital. It is quite clear, however, that as in other hospitals, such cases may have been admitted and treated; and surely no one will deny that in every hospital in London such a thing occurs. It is one thing, however, to say that an hospital is open for the reception of cases of unsound mind, and another to say that a case is occasionally, and under urgent circumstances, admitted. It is said that I have had cases of hysterical mania in the Home; but nearly all those cases were already published in my work, and it was presumed by my solicitor that any work treating on any form of insanity had been under the supervision of the Commissioners, and it was therefore unnecessary to allude to such works in my reply."

Letter from the Author of the paragraph which appeared in the Times:—

"DEAR SIR,—Having seen part of the evidence on which it is sought to procure your expulsion from the 'Obstetrical Society of London,' and in which it is inferred you were virtually the author of an article which appeared in the *Times* of the 15th December, 1866, I write to say that I am alone responsible for the notice in question. My visit to the Home was suggested by a gentleman quite unconnected with the Institution, and was paid more out of regard to the interests of the public than of the Home or its managers. On the day immediately after the notice appeared, a communication from you was forwarded to me, in which certain erroneous observations were pointed out—viz., that only women suffering from '*nervous diseases*,' and *not* patients of '*unsound* mind,' are received into the Home. As a non-professional man, however, I did not attach such importance to these points, as to feel the necessity of making any alterations.—I am dear, sir, your obedient servant,

"THE AUTHOR."

tion cured. The fit has vanished under surgical treatment, having been proved to depend upon physical causes. And so with regard to Mania. We have had cases of Epilepsy and Catalepsy where the patient has been cut off from all social pleasures and habits, excluded from their own friends, put away to distant places, and yet, by God's mercy, we have proved them in this Institution to be curable."

"'*Curability of certain forms of Insanity, Epilepsy, Catalepsy, and Hysteria in Females,' published in* 1866, *by Mr. Brown.*

"*Incipient Suicidal Mania.*—Many years' gradual illness—Operation—Cure. R. P., æt. 39, single; admitted into the London Surgical Home, October 22, 1861. Several years' illness—*Two months' Insanity*—Operation—Cure—'I was authorised to admit her.' *Acute Hysterical Mania* — Operation—Cure; admitted into the London Surgical Home. *Epilepsy with Dementia*—Operation—Cure; admitted into the London Surgical Home. *Epileptic Fits with Dementia*—Operation—Cure; admitted into the London Surgical Home.—Quotations from the above work, pages, 64, 65, 70, 71, 72, 73, 79, 80."

The debate of Wednesday night has added to these accusations and replications considerations which cannot but weigh heavily in the balance of public opinion. Truly we have had more of the thunder and brimstone of a discussion forum than of the solemn conference of men anxious to believe their brother guiltless, and in the oratorical contest the fortune of battle has certainly not been with Mr. Brown. The course of Mr. Seymour Haden's speech, rendered eloquent by the force of his apparently honest indignation, was hardly stemmed by Dr. Routh's appeal for a charitable verdict, while the defence of Mr. Brown, with whose most painful and difficult position we can easily sympathize, offered a paltry stem to the torrent of denunciation poured upon him. We confess to a feeling of extreme disappointment at the tone of this reply, and at the absence of the most powerful defence which lay within the grasp of the accused. We trusted to have been relieved by hearing an explicit and unquestionable reply to Dr. Barnes's challenge. "Now, I ask Mr. Brown, who is present (there he sits), if he will say here that he never operated upon a patient without the knowledge of herself, or of her friends, or of her husband." If we could not hope that the silence which followed was due to want of self-possession or some such feeling, we should be compelled to join in spirit in the vote of the Society. But can we not appreciate the confusion of mind—the bewildering influences of the situation—the apprehension of the public stigma to come—perhaps the regret for indiscretions of the past, and join with Dr. Routh in his appeal for favourable consideration.

Reviewing the course adopted towards Mr. Brown from first to last, we cannot but think that the friends of the Society will experience as much regret at it as we do. Now that the prosecution has proved successful, the consideration recurs whether it was judicious to raise the question at all. The *cloaca* has been disturbed, and its foulness or fragrance pervades, not only the Profession, but the entire public—dissensions have been introduced between brother and brother, and fed fat with the exaggerations of rivals and the general gossip—one of our most noble Societies has incurred the opprobrious precedent of acting as a public prosecutor, perhaps with no very decisive result—the public has been advertised of the suspected existence of infamous practices in our ranks—and all for what? To crush a man who, if guilty, might have been much more effectually extinguished from social position and professional practice by the individual stigma of each member; and, if innocent, ought never have had it to say that he was persecuted by a clique, or condemned by a prejudging and irresponsible tribunal.

For ourselves, we have to say that we earnestly trust our pen may never again be called upon to act in such a cause. In contending to obtain an absolutely unprejudiced judgment, and to counteract the elements of petty personal jealousy or professional rivalry, the Medical Press and Circular will, we hope, have escaped the taint of palliating irregularities in our profession, or coquetting with the quackery which it has never yet failed to denounce.

Notes on Current Topics.

The Prince of Wales at St. Bartholomew's Hospital.—We recently announced that the heir-apparent had accepted the office of President to St. Bartholomew's. On Wednesday last His Royal Highness, accompanied by their Majesties the King and Queen of Denmark, paid a visit to the hospital, and remained in the wards about an hour and a-half. They were received by Mr. Paget, who is now the senior surgeon, owing to the retirement of Mr. Wormald and Mr. White, the treasurer. The Royal party expressed satisfaction with the arrangements for the accommodation of the patients. We cannot refain from once more alluding to the proposed liberal changes at this ancient hospital, and repeating an earnest wish that they may be effectually carried out. It is well known that Mr. Wormald only held the position of full surgeon some five or six years, having served in the grade of assistant some forty-three years prior. Such an occurrence is not likely to be repeated. We hope it is now impossible. As to the creation of special departments, nothing decisive has transpired. It is to be hoped, however, St. Bartholomew's may lead the way. The appointment of some able men outside the existing staff could not fail to increase the efficiency of the arrangements, and give general satisfaction. Hospital men rail at special institutions. Let them then provide what

is really wanted by the profession and the public, and thus extinguish the necessity for them.

JUSTICE AND MERCY.—The cases of Toomer and Wager, which have both been again commented upon very freely during the week, can scarcely be passed over in silence by a medical journal. It is notorious that in the former a most severe sentence was passed and is being carried out for an alleged rape, when all the medical evidence went to show that such a crime could not have been committed. The verdict of the jury was, in fact, a complete surprise to the court and to the country. Yet Mr. Walpole has been utterly deaf to the many appeals made to him to consider the sentence. On the other hand, Wager was convicted on unmistakeable evidence of, perhaps, the most thoroughly brutal wife-murder in this generation. To the surprise and indignation of the whole community, in his case the capital sentence is at once commuted. Whence this astounding inequality? The defence made by Mr. Walpole in Parliament clearly shows that he is unfit to exercise the power confided to him, and renews with ten-fold force the oft-repeated arguments in favour of a regularly constituted Court of Appeal. We cannot possibly subscribe to such a blind-fold exercise of the prerogative of mercy as this. The only excuse for leaving it in the condition in which it remains, is the supposition that the revision was conducted with that degree of common sense which commends itself to the English mind, and to the exclusion of technical quibbles. But the intricate maze of lawyer's objections, or the inconveniencies of a second trial, would be a thousand times better than the alternate severity and leniency which the Home Office has lately displayed. Convicted on faint evidence, Toomer undergoes the severest penalty, while Wager, the wife-murderer, escapes the one penalty that alone has terrors for such as he.

WORKHOUSE TREATMENT.—"Died from disease, destitution, and want of proper care." Such was the verdict of a jury last week on a journeyman shoemaker, who died in Greenwich Workhouse, on the night of Sunday the 10th ultimo, a night in which shelter was sadly needed, as many a reader may recollect. This poor man having been refused admission at more than one of the common lodging-houses of Deptford, sought and found a temporary lodging with a former employer. He worked for his food and shelter, but the next Wednesday was quite laid up. The following Saturday the relieving officer gave an order for the medical man to visit him. This gentleman ordered the patients' admission to the workhouse. The horses usually employed for this purpose were engaged elsewhere; so in the evening a butcher's open cart was used to convey the poor sufferer to the Union-house, about two miles distant. Arrived there, and the order presented, it was endorsed "no room," and the butcher's cart was again called into service to take the patient back to Deptford. The next day delirium set in and a straight-waistcoat was used. The evening after he was again taken in the same cart to the Workhouse and admitted, though, in order to make room for him, a patient *in the lunatic's ward* was removed from his bed. Three hours after his admission, the poor fellow died. Well might the coroner say it was "the most distressing case that had ever been brought under his notice." It would, however, be incomplete without some items brought out in the evidence at the inquest. It appeared that besides the house being full when this poor man was first brought, three lunatics were waiting for admission, and two other cases had been turned back. Clearly the accommodation was insufficient for the requirements of the parish, to say nothing of the distance that many have to travel to the workhouses. It is well that under the new act these grievances are likely to be remedied. We hope soon that such cases as these which have lately too often cropped up will become impossible. In the richest country in the world, with a poor-law in full force, it is a sad comment on our boasted civilisation, for men to die of "destitution and *want of proper care.*"

ORDER OF THE BATH.—We are glad to perceive that there has lately been a distribution of the most honourable Order of the Bath amongst the Medical Officers of the Army and Navy. It is a step in the right direction, for duly rewarding distinguished services in the field, but we particularly regret observing that, in the Naval Service, no Irish names appear. Whether this be due to an oversight, we are quite unable to say, but the selections have been, undoubtedly, English and Scotch. Such strange facts do leave their marks behind. Can it be that there have been no medical officers from Irish schools and colleges in the thickest of the fight, and where the fire was hottest? It cannot be this, for we could name many of our pupils who were complimented for rendering assistance to the wounded, in positions eminently dangerous, under a cannonade that was fitly described as "un feu d'eufus," and we recollect clearly names being mentioned in despatches, but we refrain from quoting them now, lest we should be suspected of personal motives while contending for principle. The omission which we are now pointing out must cause a deep prejudice in the minds of our alumni against the naval service, and the sooner such oversights are rectified, the better for its interests. Poor Cindrella's willing brothers are welcome for the posts of danger, when hard knocks are imminent, but when the danger ceases, and when C.B's. are conferred, their names are absent from the lists, for we suppose this to be one of the instances in which "No Irish need apply."

AGRICULTURAL LABOURERS.—It appears that in some remote parts of England, men manage to exist and bring up families on wages of seven or eight shillings per week. How on this wretched pittance they keep body and soul together, how much they spend on coal during such a winter as we have lately passed through, what they eat and drink, and wherewithal they are clothed—even in the more clement season to which we are looking forward, are questions we have no pretence of being able to solve; while, as for the many moral bearings of such a fact, we must remit them to the many excellent writers who have dwelt upon them. A remedy for this state of things has been carried out by Mr. Girdleston, the clergyman of the parish of Halberton. He has assisted the labourers in his district to move to places where wages were higher, and thus enabled not a few to better their condition. The plan has been in operation more than half a year, with uninterrupted success. This is a kind of practical philanthropy in which the Medical Profession will rejoice to join, and which we, accordingly, take an early opportunity of commending. Throughout the country it is well known that the doctor knows and deplores the hard struggles for existence of the poorest classes—perhaps even more intimately than the clergyman. He sees the consequences of poverty in many

a case of disease he is powerless to arrest, and his influence is always thrown into the balance in favour of the suffering poor. Mr. Girdleston, in his truly charitable work has had to *encounter* much opposition from the farmers of Halberton, who have subjected him to all the petty annoyances in their power. No doubt they cherish the same kind of feelings towards him that "Guardians of the Poor" have so often indulged towards medical officers. Like them, he can smile at their opposition and go on in the path of duty and benevolence. The farmers themselves will in time learn wisdom. If wages rise in their neighbourhood, the poor-rate will probably fall, and in an improved condition of the labourer they will find the means of an improved cultivation. In the meantime a great work will be accomplished by the mere transference of labour from an overstocked market to one where there is scarcity. Good will result to all parties. We wish Mr. Girdleston a still larger success, and imitators in every district where the same conditions exist.

Chemical Toys.—Dr. Divers, in a letter to the *Times*, cautions the public against the dangers of numerous toys that have lately been sold in large quantites. Pharoah's serpents are made of sulphocyanide of mercury. Devil's tears are composed of the metal sodium. Sensation cigarettes are charged with gun cotton. Parlour lighting, sold under a variety of names, consists of pyroxilin and so forth. It would be needless for us to inform our readers of the manner in which these substances, and many others, might give rise to accidents. The public should have had sufficient warning by this time, but playing with fire has always been a favourite amusement, and we might as well protest against a new sensation as a new fashion. As to the science inculcated by these toys the less said the better.

The Practice of Abortion in America.—The crime of child-murder on the *fœtus in utero* has, it would appear, reached so great a frequency in America, that its professors not only carry on their secret trade with a profitable impunity, but they openly advertise, in their own proper names, their readiness to perpetrate the crime, or to provide others with the means of doing so. The *Philadelphia Reporter*, of March 2nd, reprints at full length a circular extensively disseminated by a person named Newton. We cannot defile our columns with this pestilential address, but may say, briefly, that the author of it offers to send by post an instrument called the "genitive regulator," intended to effect the removal of the impregnated ovum. Here is a literal extract:—

"Our plates give full information relative to the genative organs of the female, *which are to be sold or presented to each confidentially, through the aid of the practitioner*—our agent—subject always to their judgment or dictation. They show the ovum. Also, application of instrument by the female's own hand, and how the instrument comes in contact with the ovum, causing it to be removed without irritation or disagreeable sensation or detriment to health, but an absolute benefit.

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"*Directions for Using the Genitive Regulator.*

"Within a few hours after the cessation of the catamenial discharge, and while the os uteri is dilated, introduce the regulator and pass it carefully into the uterus and turn it a few times in order to separate the embryo umbilical, as represented in the plates; after which it will pass off as foreign matter, leaving the person free from danger until the next period, when it should be repeated, which is done without risk or pain."

Scholarships for Natural Sciences at Cambridge.—We are glad to find that Downing College offers one of its foundation scholarships, of the value of £50 per annum (with rooms and commons, making the value £90 or £100), tenable for three years, as a reward for proficiency in the Natural Sciences. The examination will begin on the 5th of June, and be open to all members of Oxford or Cambridge, who shall have passed the previous examination or the responsions, and shall not have resided more than six terms. Other scholarships are also to be competed for at the same. Natural Science forms part of the examination as well as classics and mathematics. These are open to students who have not entered at the University, that is, we believe, to all students without any restriction, provided they are not members of the University. Particulars, however, can be obtained from the Rev. W. Pike, or John Perkins, Esq., tutors of the College.

The "Cat."—In spite of the many objections that have been so constantly urged to retaining the punishment of flogging in the army, Parliament has resolved that it shall not be abolished. It is undeniable that difficulties surround that solution of this question which naturally commends itself to humane men. There is something so revolting in mangling the flesh of the victim, and so many tales of horror have been inflicted upon the public, many of them unhappily too true, that we should shrink from adding to them. On the other hand, it has been very strongly urged that no other punishment holds out sufficient terror to the criminal to serve as a substitute for death, which enters so largely into foreign military codes. Abroad delinquents are shot without compunction, and with all the out-cry that has been made the British soldier is more considerately treated than that of any other country. Nevertheless, the lash, we believe, is condemned. In future it will only be inflicted by court-martial, and for the most heinous crimes. It is a fact that only a very small minority of the worst characters have been lately condemned to corporal punishment. There can be little doubt that it will be found less and less necessary as the army improves, and we trust that the use of the "cat" in time of peace will soon be scarcely known in the army. It will become intolerable for the soldier to be liable to this disgraceful punishment, except for those offences in which it is employed in other cases.

OBSTETRICAL SOCIETY OF LONDON.

Wednesday, April 3.

Dr. HALL DAVIS, President, in the Chair.

SPECIAL MEETING.

The President: Gentlemen,—We are met here this evening specially, in pursuance of the notice which I read at the last meeting of the Society, to consider and vote upon a resolution which was notified at that meeting. In the first place, the resolution will be proposed by Mr. Seymour Haden, and will be seconded by Dr. Barnes; then the reply of Mr. Brown will be heard, and any other remarks from other Fellows of the Society. The ballot will be taken in the next room, and it must be distinctly understood that those gentlemen who

do not vote must be considered as voting for Mr. Brown. The vote will be according to the rule which I have referred to.

Dr. MURRAY (Hon. Sec.) : The rule is this :—If, on a ballot taking place, two-thirds of the Fellows present shall vote for the removal, the President shall declare the Fellow in question removed accordingly." Therefore, those gentlemen who are present will be considered as voting.

Dr. SEYMOUR HADEN moved "That in pursuance of the resolution of the Council, notified to the Society's general meeting, March 6th, Mr. Isaac Baker Brown be and is removed from the Fellowship of the Obstetrical Society of London." Now, if it should be asked, and it will be very naturally asked, why a Fellow—like myself—who has never taken a part in any of the discussions of the Society, should come forward to move this very important resolution, I think, perhaps, the best answer can be found in that very fact that I never have taken any part in any of the discussions of the Society, and especially with regard to the question before us. I may add to that that I have positively no knowledge of Mr. Baker Brown—none whatever; that I have therefore no prejudices to blind me, nor any animosities to gratify. I think, also, it will be as well to state that I have had no better means of forming a judgment upon this case than any other Fellow of this Society. I have simply read various publications upon the subject, many of which have been contributed by Mr. Baker Brown himself, and I think I may say that upon the indictment drawn up against himself by Mr. Baker Brown, and upon that alone, I came down to the Council and moved a resolution for his expulsion. I wish to take at once upon myself the whole responsibility of moving that resolution, because I am perfectly conscious of having done it upon broad Professional grounds, and without the smallest reference to Mr. Baker Brown, or to any member of the Council whatever. We have to remember, gentlemen, what we are as the Obstetrical Society of London—we have to remember that, in choosing the particular branch of Medicine which we follow, we have constituted ourselves, as it were, a body who practise among women (because I suppose that nineteen-twentieths of us do so practise); we have constituted ourselves, as it were, the guardians of their interests; and in many cases, in spite of ourselves, we become the custodians of their honour. (Hear, hear). We are, in fact, the stronger, and they the weaker. They are obliged to believe all that we tell them. They are not in a position to dispute anything we say to them, and we therefore may be said to have them at our mercy. We, being men, have our patients, who are women, at our mercy; and I think, under those circumstances, that if we should depart from the strictest principles of honour — if we should cheat and victimise them in any shape or way, we should be unworthy of the Profession of which we are members—(hear, hear, and applause)—and certainly unworthy of being Fellows of this Society. (Loud cheers.) Now, feeling this, and feeling the urgent necessity for some such movement as we are engaged in to-night, I think, without any breach of confidence as to what took place at the Council, I cannot do better than state what happened when I brought the resolution under their notice. I came down, as I have said, wholly on my own responsibility, having mentioned it to no one. I found the Council engaged in endeavouring in every possible way, apparently, to meet Mr. Baker Brown upon less serious grounds than those which ultimately became necessary. I sat for two hours at that Council, and became perfectly convinced that there was no way of dealing with Mr. Baker Brown except by the resolution which I have just read. It was under those circumstances that I proposed the resolution, and that the Council adopted it *nemine contradicente*. At the same time, it is only fair to the Council to state that after a couple of days' interval they, feeling the extreme importance of the measure that had been proposed to them, called another meeting of the Council actually with a view, if possible, to hear objections and to arrive at some other result. But it was impossible. After sitting for two hours more, and twenty members of the Council being present, they came to the resolution that there was nothing to be done but to expel Mr. Baker Brown. (Hear, hear, and applause.) Now, having said that I think this Society is the right place in which to bring forward the resolution, I will state what are the broad motives under which I have thought it my duty to move it. I have already stated that they are not in the least personal. The motives which have induced me to bring it forward may be included, perhaps, in what I might call the growing insensibility on the part of the profession to the inroads of quackery, and its consequent decline in public opinion —those are the reasons which have brought me here to-night. The quackery of former days was comparatively innocent to the quackery of the present time. It was executed, whatever it was, by mountebanks outside the camp, who blew their trumpet *extra muros*, as it were, and made bad jokes, and gathered up a few halfpence, and there the thing was at an end. But now, the quackery of the present day is dangerous in this respect, that the quack of the present day has found out that he can base his operations upon an actual legitimate professional footing. He can obtain a degree, and from that moment, if he does become a quack, he becomes a quack of the most dangerous character. I may perhaps be permitted to draw attention to at least two forms of quackery which strongly affect the Society. One of them consists in this—in the diagnosis of disease which has no existence—(applause) —in the laying of women upon their back for weeks and months together, and in daily ministrations, cauterisations, and leechings to people who have literally nothing the matter with them. (Hear, hear, and applause.) I say that that is a form of quackery certainly not rife in this Society, thank God! but a form of quackery carried on with great success by at least one, if not more, Fellows of this Society. (Hear, hear.) The other form of quackery, and the only other form which I shall think it worth while to allude to, is the one under our immediate consideration. That form consists in this, if I understand it, in the pretended cure of real disease by means which have no foundation in philosophy or in fact, and which, in addition, have more or less of a secret, unpunishable, compromising character. The plan is this : a small house is taken—this may be done by one man—some name is given to it at once. It is an "Hospital for Women," or it is a "Home," or something of that kind ; it does not matter what it is as long as it contains an appeal to women. We will say in this instance it is a "Home." Then three sets of appeals are sent out in the form of circulars, and they are of this kind. One is addressed to the middle classes, principally to women ; that appeal is for money. Another is sent out to the upper classes, to the titled people ; that is for patronage ; that is for the long list of great names, headed, in this instance, by the Princess of Wales—so little do these patrons know what they are about. That is the way in which this long list of patrons is obtained. The third appeal is to the clergy, and it is always couched in these words—"for their co-operation in the good work"—that is invariable. (Laughter and cheers.) The next thing, all being compared, is to call a general meeting— —which consists, of course, of the promoter of the scheme, and a few—a very few—other people, and some weak clergyman is sure to be put into the chair—that is certain. But it is my duty to go a little further. Having made these specious promises, what wonder that some poor weak woman or even that some weaker man, should take a wife or a daughter to the Home, and place her under the promoter of this scheme ? It is sure to happen ; and what occurs is simply this. The patient is put under chloroform—the inducement, of course, has been enlarged upon—the operation is so very trifling ; it is a mere nothing, perhaps, except the cutting of a fibre or the excision of a nerve—it is nothing. The husband remains downstairs. The patient is taken up and put under chloroform, and her clitoris cut out before she has recovered from the anæsthetic. Down comes the promoter of the scheme to the expectant victim below, invites him to write a cheque for 100 or 200 guineas, or whatever it may be before he leaves the house. Now, if he objects to this, which he is very likely to do, I do not say that he is informed, but, at all events, he is made to feel this—"your daughter," or "your wife," as the case may be, "has undergone a disgraceful mutilation because she has been given to disgraceful practices; if you can afford to tell your friends this, and to tell the man who is to marry her that she has had her clitoris cut out, and that for disgraceful practices well and good ; but if you cannot afford to tell them this, I think you had better pay the money and say no more about it." (Cries of "No, no," "Oh, oh !" and great uproar.) Yes. (No, no.) What ! (Cries of "No, no," "Chair," and great uproar). Yes. The nature of this quackery is that— [interruption.] I have not said that this is done ; I have said that the nature, and the end, and the aim of this particular form of quackery is an operation which is in itself a mutilation. I will not call it an operation—it is a mutilation ; and it is in itself questionable, compromising, unpunishable, and therefore secret. Now, if I went so far as to say that there was no difference between that and the practice of the Messrs. Goss, or some such name, M.R.C.S.—(a laugh)—who stand between

their patient and the door, and tell their patient they will expose him unless he pays a certain fee, I should be going a little further than the facts would warrant me. I do not mean to be unfair, or to go one step beyond what the circumstances warrant; but as a fact I have positively stated that there are many women who dare not speak of this, and that Mr. Brown knows it well when he cuts out their clitoris. (Cheers.) Well, but after all the question still remaining is this—Is this quackery? I shall prove before I sit down, which will be very shortly, that Mr. Brown himself confesses it to be quackery, and in this way: he states all that I have read to you, but the end and aim of all that he states is, that he cures insanity by a surgical operation. There can be no doubt of that, and that the "Home" is of all places the best; indeed, it is the only place at which this beneficent treatment can be obtained Very well, then, Mr. Brown has distinctly asserted that h cures insanity, in many of its forms at all events, by means of this operation. But that does not prevent his writing a letter to Phillips, the Secretary of the Lunacy Commissioners, to declare that in no papers or advertisement issued or published has it ever been stated that females of unsound mind had been operated upon, or admitted even into the Home. (Hear, hear.) Now does not Mr. Brown himself admit that what he said previously is untrue? Either he has cured these people, or the whole thing is a sham. If he has not cured them, and if it is true that they have not even been admitted into the Home—as one must believe him in something—I choose to believe that when he wrote to the Lunacy Commissioners to say that no cases of insanity had ever been operated upon, or even admitted into the Home—I choose to believe that in that single letter Mr. Brown states the truth; and therefore I think we have convicted him of quackery, and that clitoridectomy is a quackery. On the part of the Council, I think I am warranted in saying that, after all the pains they have been at, after the scrupulous pains they have taken, after the labour they have been engaged in, all for the honour and welfare of this Society, if the vote to night is adverse to them, they will be obliged to regard it as a vote of want of confidence. (Hear, hear.) They will not do less—it is impossible they can do less. Now, the point is simply this: If this meeting should support Mr. Brown, it endorses his principles, and accepts his acts. (Hear, hear.) That is the point. I entreat you to let no casuistry of Mr. Brown's, or, indeed, of any other speaker, interfere with your healthy understanding of that point. That is the point: you endorse his principles and you accept his acts if you do not support the Council to-night—(hear, hear)—and in future, Professional honour and truth will be measured by the standard that you thus deliberately set up. (Loud and long-continued applause.)

Dr. Barnes: Mr. President,— I think I never in my life rose on a more painful occasion to myself, and never have I listened to any argument more convincing to show the necessity of the steps that have been taken than the speech that we have heard from Mr. Haden to-night. Of course, it may be said—and we have had rumours about—that this movement has been started by Professional rivals of Mr. Brown. There is no motive of the kind, and I may state this, that one or two members of the Council, who may have been in personal conflict with Mr. Brown, took no part whatever in the proceedings; they were not present, or, if present, they took no part in the matter. Our opposition is directed entirely against a gross infringement of Professional honour, a most shameless and abandoned course of profligacy and falsehood; and if these things are associated with any individual, our opposition is against him, and our hostility goes no further than that. I may say in the first place that the reason why it was not thought necessary to publish these matters was, that they had already been published, and those published matters contain Mr. Brown's own replies. The charges were made distinctly by Dr. West in language which no man could mistake, and by a man of the most unimpeachable honour and integrity. Mr. Brown goes on to say, "My writings have always been addressed to the Profession"—as if he made a distinction between his writings and his other publications. Are not his speeches to those weak-minded clergymen that we have heard of, and to others that Mr. Haden has referred to, publications? Have we not had the most distinct appeals made to them? Have we not had pamphlets sent round to the Profession and speeches made containing the most disgusting particulars, circulars sent round from his own house—a thing that no Professional man that I know of has ever yet ventured to do—(hear, hear)—begging for subscriptions, and enclosing prospectuses, and even enclosing this paragraph of the *Times*, with an alteration of a few words? The next point is too important to pass over. He says—"I entirely deny operating upon this patient without her cognisance." That refers to the case in which he was accused of doing this by Dr. West. Upon that point Dr. West reiterates from his own personal knowledge that it was the case, and I think Mr. Brown will hardly get out of the matter by saying that he had a private compact with his patient without the cognisance of her medical attendant or her husband, and that she "sold" him. (Sensation). More than that, Dr. West does not base his accusation upon that point. He says—"I state this deliberately, because I know that this is by no means a solitary instance of the removal of the clitoris by Mr. Brown without the consent, without the knowledge of the patient and her friends." How does Mr. Baker Brown think to escape from that? He simply states that that most direct, most positive affirmation of Dr. West is a vague statement, not worthy to be gone into. I ask Mr. Brown here if he will deny that fact in this room—if he will say here that he never operated upon a patient without the knowledge of the patient herself, or of her friends, or of her husband? I think he dare not say it, and if he did, I think twenty men in this room would confute him on the spot. Then there is the case of Mrs. Peaty. We need not dwell very much on that point, because it is really not very important. The great reason the Council placed it in the published matter was this, that it had gone before a public court of law; it had got into all the daily papers that this form of clitoridectomy—mutilation without the knowledge of the patient or the husband—had become a matter of public scandal, and that was one reason why the Council could not pass it over—why we were compelled, in vindication of the honour of the Society, to bring it before it. But Mr. Brown cannot even make a reply without some equivocation or some indirect statement which amounts to a falsehood. He says here that the operation was performed in the usual way at the Home in the presence of her own medical man, Dr. Taylor, with whom she had resided before her marriage. Now, we have a letter from Dr. Taylor:—

"To the President of the Obstetrical Society.—Sir,—May I take the liberty of calling your attention to a mistake of Mr. Baker Brown's in Nos. 12 and 13 of his reply to the remarks of the Council of the Obstetrical Society? Dr. Brown there states that I was present at the operation performed on Mrs. Peaty as "her own medical man," thus implying that the operation was with my consent. Now, I never attended Mrs. Peaty either before or on that occasion, and my presence at the Home as a student in ovariotomy was no unusual occurrence. Indeed, I was surprised at seeing Mrs. Peaty there, not having seen her since the time of her marriage, nearly twelve months before. May I ask the favour of your making this known to the Fellows of your Society? and believe me to be, with much respect, your obedient servant, J. Taylor, M.D."

Dr. Barnes—Now, there was another point on which we insisted very much, because it goes to the root of all honourable professional intercourse. (Applause.) No man should venture to perform an operation in the absence or without the knowledge of the other person who is there; and yet Mr. Baker Brown attempts to justify that charge by saying, "I operated entirely on my own responsibility," for that is what he says, "and, in my opinion, a consulting surgeon is bound to do so, having regard both to the welfare of the patient and the position of the practitioner." That might be so under certain circumstances, but the cases are very different in some respects. If a medical man is in a room with another, who is the ordinary medical attendant of the patient, and who, perhaps, enjoys the patient's entire confidence, and is her personal friend as well as medical attendant; if an operation of this serious nature—mutilation, for it can be called noting else—is to be performed, without the consent of that medical man, when it is all over, and by-and-by disappointment arises, then the patient and friends begin to find fault and consider who was in fault. She says "There was my friend, my ordinary medical attendant—why did not he protect me from this mutilation?" The medical attendant says—"It was done by Mr. Brown on his own responsibility; I had nothing to do with it." Is that an answer? I ask if any woman, or any person in the world, would accept that as an answer or a vindication of a medical man who had been deceived or compromised against his own will. (Applause.) The proper course is, it appears to me—and it must appear so to every honourable man—that if a Surgeon feels that he

is morally bound by his own convictions to carry out his own practice and his own operation, he should say so plainly to the medical attendant, and give him an opportunity of retiring, or protesting, or placing the case fairly before the friends of the patient, and leaving them to decide whose advice they will follow. The explanation with regard to the Lunacy Commissioners is one which I can hardly venture to characterize among a society of gentlemen. (Hear, hear.) I hardly know how to refer to it in terms which are sufficiently within the bounds of conventional speech and yet to do justice to the matter. Mr. Baker Brown is written to by the Commissioners of Lunacy to ask for an explanation of a paragraph that appeared in the *Times*, and he writes to them saying that this paragraph appeared without his knowledge and consent—was furnished by a person indifferent to him, and that he took means, which he hoped would be successful, to correct the mistake. Now, was there any correction in the *Times?* Was the editor of the *Times* ever written to, calling upon him to explain that the Surgical Home was not open for the reception of females of unsound mind? No the editor of the *Times* was written to by the anonymous author of this paragraph whom we do no not know; he was plainly connected with the press, but he is evidently not a responsible editor of the *Times*. But whether that be so or not, the answer is given that he has taken steps, which he hoped to be successful, to correct the serious error; and he took credit with the public of having cured cases of insanity, yet, to screen himself from legal proceedings, he denies it before the Commissioners. He thinks he is safe by a sort of travesty of the plea of not guilty. A man is accused of a henious crime, no matter what it is, and before the jury or judge he pleads "not guilty;" and Mr. Baker Brown thinks that a fiction of that kind will serve him here, because he has applied to his attorney who advises him to write and say he has had no cases of that sort in the asylum. (No, no.) I will read the letters.

Dr. Barnes—Mr. Baker Brown will allow me to say he has already made two replies—they do not agree one with the other; and he may make a third if he pleases, but I doubt, if he does, whether it will agree with the others. (Laughter). Now, I was saying that the solicitor advises him to tell a falsehood, and he told that falsehood to screen himself from the heavy charge. For his answer was taken in that sense by the whole of the Profession and the world; and he ought then to have answered these points if he could fairly have answered them. I will say one word more before I sit down on the quotations from the medical journals, on which he insists very much. We have inserted here the leading articles from several medical journals—the *Medical Times and Gazette*, the *Lancet*, and the *British Medical Journal;* these were parts of the published matters which undoubtedly guided us in framing this charge—they were published matters long ago, before the meeting of this year. They contain distinct charges, and they were expressions of Professional and public opinion which showed us that there was no alternative but to bring this matter before the Society. That article in The Medical Press and Circular insisted upon so much was published after our proceedings, therefore it was not part of the published matters, and we could not possibly have anything to do with it. I have only one word more. The Profession will judge by the voice of the Society in this matter. They cannot do otherwise. We have put ourselves forward as the exponents of Professional opinion in this matter, and as we pronounce so will be the judgment of the public; and I say that we cannot, unless we are prepared to bow our heads in shame and degradation, go on as we have been doing without speaking on the subject. (Loud applause.)

Mr. Baker Brown—Mr. President and Gentlemen, I am glad at last that I have an opportunity of speaking, for I think you will agree with me—all those who have not made up their minds already what to do before they have heard my reply—that never in the whole history of Medicine was such an unfair proceedings taken as has been taken by the Council in this matter. I have been charged with all sorts of offences. They have met in secret council again and again. They have never intimated to me in the slightest degree what their charges were. (Cries of oh, oh.) They have never, if you observe, called me before them to ask what explanation I could give. (Loud cries of oh, oh, chair, and confusion.) I appeal to the sense of the meeting for common fairness. (Hear, hear.) I say they have left out to-night one of their gravest charges—and why? Because my answer completely upsets their accusation against me of want of truth. The whole of this hinges upon the neglect of the Council in investigating the subject of clitoridectomy as scientific men. Instead of examining the subject, which I challenged them to do again and again, they have neglected it, and tried to get rid of it by expelling me. Now, gentlemen, it is not a question that concerns me. It is of no moment to me whether I am in this Society or not. I repudiate the insinuation, which is as unfounded in fact as it is ungenerous of Dr. Barnes. I made nothing from the Obstetrical Society, and I should apprehend, after what has passed to-night, that it will not tend to the honour of anybody to belong to the Obstetrical Society. (Cries of oh, oh.) I say so distinctly. You have heard the mover to-night say that there are other men, Fellows in our Society, having their secret practices. Why do you not fix upon them? [A voice —One at a time. (Hear, hear, and a laugh.)] Why not cleanse your own Council of secret operations and make them pure before you attack me? I have not received fair play. If you had called me before your Council and said—"We do not think this is right—we will pass laws which we think better," while I remained a Fellow of the Society, I would have obeyed those laws or have left the Society. But if it had not been for the last meeting of the Society, what would have been the consequence? I should never have heard the charges until to-night. You would never have known what they were. They would have been mysterious charges made against me affecting my honour, and I never should have known them if my friends had not come down at the last meeting and insisted on their being published. They have been published, and you have all heard them, and are there any charges amongst them which can justify expelling a Fellow from the Society? I maintain there are not; and if I may judge from the sympathy which has been manifested for me, and from the number of letters that I have received from men whom I do not know, and whom I have never met, I believe that if you were to poll the Society by proxy papers they would be with me, feeling that I have not had common fair play as an Englishman. You never yet heard of any man being condemned without being heard. You never yet heard of any man being called a thief, a liar, or a murderer, without his being called up to state whether it was true or not. But you heard to-night from Mr. Haden, whom I have not the honour of knowing, that he made up his mind to move this motion of expulsion without ever having heard one word of my reply.

Mr Seymour Haden: Not at all. I have read your reply.

Mr. Baker Brown: It was known in London a fortnight ago that you were the mover of this resolution, and you never heard my reply. I say there is not a single man—not even Dr. Barnes himself—who has been as open in his practice as I have been. There is not one man in the profession who has stood up as I have done, and shown his practice openly. Look at this "Home" which Dr. Haden has scandalised and slandered in the most shameful way possible. I say that the way in which he has described the proceedings there is untrue from beginning to end. (Mr. Haden: "No, no.") (Great uproar.) I maintain that my late colleagues in the room have all performed this operation. I maintain they will all assert that I never did the thing that I have been accused of doing; that I never went down and demanded a fee from a husband or father. There were no fees demanded at the Home. It is a gross scandal upon the Home, and upon all those gentlemen associated with me. In that Home there have been, according to the entry book, 3417 entries of medical men who have visited it in the last seven years, since its formation. I do not consider that they are the signatures of 3417 individual men, for many gentlemen have been there again and again—much oftener than they state; but if I did the thing in secret—if I had practised quackery—why should I invite all the profession to come and see me? Why should they come without an invitation? Why have they come from the north, from the south, the east, and the west—from the antipodes, from Australia, from Sidney, and Melbourne, and from every state in America—why have they come? They would not come unless they saw everything really professional. Has not my work been open? Has it been secret? I deny the charge. I have done nothing in secret. I deny the charge of untruthfulness. My writings have been as open as Dr. Barnes's have been, and as practical as his have been; and it is not true to state that I have been secret and had an object in

being secret. I have been open. I have come to the conclusion that the operation of clitoridectomy is a justifiable operation—not my operation, recollect, gentlemen, but an operation that has been practised from the time of Hippocrates, and has been mentioned by all writers since that period again and again. Why, at your own very Society's meeting there were instruments in the room, I think, of Dionis, invented on purpose for clitoridectomy. (Cries of oh, oh.)

Dr. Barnes—For circumcision.

Mr. Baker Brown—Clitoridectomy is nothing more nor less than circumcision. (Cries of oh, oh.) You may say oh, oh, but I maintain that clitoridectomy is neither more nor less than circumcision. (Loud laughter, hisses, and groans.) I have heard the same noises before in this room. I have heard the same noises before within ten years, when a man dared to get up and say that the speculum ought to be used. Why, look how my friend Dr. Henry Bennet was met in this room, because he dared to use a speculum in examining a woman's uterus. How did they treat him? Did not these very men try to ruin him? Did not they condemn him, and write him down? (Cries of no, no.) They did; and yet Dr. Bennet's practice has proved to be a standing practice in the profession. I say if you discuss the question whether clitoridectomy is an operation founded upon pure psychological facts, investigate it like men. Dr. Tanner brought a paper forward in a scientific, proper way, and he declared it was a question which must be considered, and which could not be passed by in the profession. I asked for a committee again and again. I asked for a committee and it was not granted. Is that the way to meet the subject? If the operation is so bad, and so unfounded in practice, then ignore it, and come to a proper determination upon it. If you, as a Society, say it is a subject which cannot be treated—it is not an operation which can be performed—then come down and say so, and if I perform it afterwards, expel me. I am no more a quack than you are, or any one in this room. I am as highly educated, and have done as honest work, as any of you have done in this room. I am not the founder of a small "Home." I founded St. Mary's Hospital, or at all events, I took the largest share in it, and this little Home that you speak of, has fifty beds in it, and it is open to the whole profession. I say you have given me no reasons. You have given me twenty pages of matter of other men's accusations, but have you put one single word in my favour in these charges? Have you put one single reply of mine to the charges made against me. Surely I know as much about the physiology of the female genitals as Mr. Haden does. Have not I done it openly. Look at St. Mary's Hospital. Who was the first that performed ovariotomy and all other operations on the female genitals publicly? I contend I was. Am I quack and a worker in secret? I scout the charge. I am an open and honest worker. I have fought the battle for the profession in a great many things—not only in ovariotomy but other things too—and have had to bear the brunt and burden of the day, There are men in this room who will continue the practice in spite of what you are doing. I know one man in a hospital says he will do it in defiance of you, and he is a Fellow of your Society, and one of your own Council is Consulting Physician to it. He is doing the very things for which you condemn me. (Name, name.) I hope the gentleman is here; he is not ashamed of it, and is able to give his name himself. I tell you as a fact. (Loud cries of name, name.) There is no confidence at all. I will give you the name if you think it necessary. I have performed this operation because I believed it to be a justifiable operation. I have done it to the best of my judgment, and in a way which I considered professional. I may err—we all may err; but if I have erred call me before you, and show me where I have erred. You have not shown me yet. I was asked to believe that there had been no injustice and no personality. Why, gentlemen, I have in my pocket a letter from a gentleman who was written to by a member of the Council to ask him to come up and vote, and his remark was, "The case must be a very bad one if it wants whippers-in." It is well known that every effort has been made by the Council to bring voters up, and they now put forth a threat, which we have heard twice repeated to-night, that if the motion is not carried the Council will resign. Surely their case must be a very weak one, and they must have a sense of injustice in their hearts towards me, if they can throw out those threats. If the case is so plain, there surely can be no need for using those extraordinary measures against a Fellow of the Society. I published the truth; and as for matters of opinion they have quoted, and as for the Commissioners of Lunacy, I had answered the letter, and had said—"Excepting those cases already published in my book." My solicitor who advised me—for, recollect, I had internal evidence that those Commissioners were put upon me by the very parties that are mixed up with this motion—(Cries of "Oh! oh!" and "Chair, Chair." Then you are told there was no writer of the article in the *Times*. Is a man a forger? Are we all liars, according to Dr. Barnes' statement? I never knew the gentleman until he came to ask permission to go over the Home. He is an *attache* of the *Times*. I have shown the letter to a friend of mine, and they will bear me out that he is a *bona fide* man who writes to the *Times* regularly. I did not know anything about what was going to be in the article until I saw it in the paper, and I wrote to him the next day. In my reply you will see the letter written by himself, and I will show the original to the President. I say then, sir, as an Englishman, I stand upon the rights of an Englishman, and I say that I have been prejudiced without a hearing; and I ask you to-night in this room—I put it to your consciences—whether I have done that which deserves the punishment only accorded to a malefactor, for your law never intended that a man should be expelled from the Society because of his opinions—because his opinions differed from those of the Council. If that is to be law I ask you where you will stop. If you pass a vote to-night expelling me, you must go on to other members of the Society. You must go on to members of your own Council who have been convicted of want of truth, and who have been convicted of unprofessional acts. And Mr. Haden himself, by his own showing, must go on with it, for he would not dare to say I was the man who laid the women on their backs and used the speculum, and applied the caustics, and so on. He must go on with it. Then, who are to be the judges? Are the Council to be the judges? They must clear themselves first. Where are you to stop? It is a grave Professional question, and I maintain again it is a question that will not bear the light of the open day; and I know of my own knowledge, from the amount of letters I have received from men all over the country, that I have the kind sympathy of a great many men in the Profession not in this Society. You may pass a vote condemning me to-night. I do not think you will. I do not think there are so many against me in this Society. But if you do I tell you frankly I shall not consider it a stigma, and as it will apply to myself, I am surely the best judge of what I consider a stigma, because I feel that I have not been treated honestly and fairly. (Hear, hear.)

Dr. Robins (of Charlotte-street, Fitzroy-square)—I have never spoken to Mr. Brown in my life, but I do feel, having listened to and watched all that has been said in this matter, I observe they are extraordinary. (Laughter.) But I cannot believe that Mr. Brown has acted in *mala fides*. I will ask the whole Obstetrical Profession has not Mr. Baker Brown given as many hostages as any other person to the Profession?

Dr. Squire—As no other member of the Council has risen upon a question of fact, I, whose only merit may be that I attended every meeting of the Council, deny that Mr. Brown asked for a committee. It seems to me that the way in which the Council were forced into action was that it was published in two medical journals. I myself saw, to my great astonishment, a publication that the Council had been already asked to inquire into this matter, when the Council had received no such request; and at the next meeting of the Council we found in the meantime a letter had been sent, but withdrawn, and never came under our notice at all. And here Mr. Brown to-night, and Mr. Brown, jun., at the last meeting, say this committee had been demanded.

Dr. Savage—Mr. Seymour Hayden addressed us in the most powerful manner on the part of the prosecution—(cries of "Order, order," and great uproar)—I repeat, on the part of the prosecution. But, in fact, what has been produced has been this—an abstract with everything that could possibly be turned in favour of Mr. Brown carefully abstracted from it. I do not consider that quite fair. However, Mr. Brown has had the opportunity of replying, and has sent round a circular which may be considered parallel to the one sent round by the Council, so that I have little else to say. Mr. Brown may say what he pleases He may say he does not care. He may say it will make no difference. But I know it does make a difference.

I should be ashamed to be connected with this Society if I did not feel that if I had misconducted myself in such a manner as to deserve to be sent out of it I should forfeit my position in the profession. My object in joining the Society was simply to contribute my mite of information to the advance of obstetrical science. I cannot follow Mr. Haden in his statement of our out-of-door ethics at all. I know what we owe to each other, and that is fairness and common honesty. There has been much acrimony displayed against Mr. Brown. I am very sorry indeed that Mr. Brown undertook his own defence. I am sorry he ever uttered a word. I am very sorry indeed for Mr. Brown that he ever offered the Society an opportunity of inquiring into his conduct with regard to clitoridectomy. It had better have remained just as it was—to be estimated by the profession according to the results as they turned out from time to time.

Dr. Routh—I really do think, and am afraid, that Mr. Brown has damaged his cause by having spoken in the way he has done, and I am sure that there is much to say in his excuse, inasmuch as when a man is put in the very difficult, painful, and unenviable position in which Mr. Brown has been placed, if he is not listened to with that attention which he ought to be listened to, and if he is constantly interrupted —(No, no)—then, sir, that gentleman is sure to become confused, and his reply, instead of being one which will be in his favour, may be construed to be one which is just the reverse. Now, sir, I hope that in this state of facts the Society will listen to me as I endeavour to make a few observations to show why I think it would be wise in you and in the members of the Obstetrical Society generally not to carry out this severe and harsh sentence against Mr. Brown. Now, sir, in the first place, I must start with this proposition. I do not care what the press generally may say. I am now speaking in general terms as to the conduct of A., B., and C. It is perfectly well known in these days that a particular class of papers take up a particular bias of doctrine, and upon that bias of doctrine they write. I will take an instance. Supposing any one of us wanted to form an opinion on John Bright—(Question, and uproar.) I do hope, and I appeal to the Society—I stand here really with a wish to do justice towards a fellow-man who is in great distress, and I stand up here as a man, to say a word in his favour. Now, sir, I say if you wanted to form an opinion of John Bright, would you take that opinion from the *Standard?* If you wanted to form an opinion of Lord Stanley, would you take it out of the *Evening Star?* Certainly not. Why? Because those papers have peculiar doctrines, and it is part and parcel of their doctrines to oppose Mr. A., B., or C., because he holds different opinions to themselves. In the same way, I say you are not justified in taking, as grounds of justification, the opinions in the medical articles of any journal; and so far I believe that that document which has been issued by the Council has been formed in accordance with those articles. Mr. Brown has spoken in the strongest terms of Dr. West. Now, I have had the pleasure of meeting Dr. West on a great many occasions: I know he is a man whose name will be handed down to posterity as a great name in our profession. But, sir, would I pin my faith to Dr. West as to any matter of doctrine? Have I not got the right given to me, thank God! that I can always use my knowledge of right and wrong to know whether Dr. West is right or wrong? It appears to me to say that because Dr. West says such and such things are so, it does not follow, because Mr. Brown says such and such things are not so, that therefore Dr. West is right and Mr. Brown is wrong. The inference is perfectly illogical. It is said Mr. Brown went and operated upon a lady—it is stated here on the authority of Dr. West—against her consent. Now, that is a grave charge. What does Mr. Brown say? Mr. Brown said—"Yes, I did. I now see that I committed an error." But I will ask you this. I do not talk to those gentlemen who have the experience of the world upon them, but I ask the young men of the Profession—those who are rising up—I ask those young men, if a woman came to you and told you, "I am doing such and such things —I do not want my husband to know it." I think there are very few young men (loud cries of no, no) who would not do as Mr. Brown has done. Supposing a lady came to you and told you she was in the family-way; but, unfortunately, this lady being a married lady—I take a case that may occur and has occurred—she will tell you—she will probably let out the fact—that her child is not her husband's. (Oh, oh, and laughter). Now, I will ask you is it any part of your duty, having got this information, to go to the husband and say—"That wife of yours is not virtuous." Certainly not. Now sir, I will go to another point. It is said Mr. Brown has been in the habit of cutting off the clitoris of persons without informing them of it. Now, if that be so, I will merely ask you if you had to operate upon a patient—I do not care what the operation may be—is it customary to enter into the minutiæ and to describe every particular phase of the operation to the patient? (Yes, yes.) Then if it is the custom, there are very few Surgeons who keep to it. (Oh, oh, and question, question.) That is the question. It is because this goes so home in the matter that you call out question. But I know this to be the fact, and you and every one of you know it also to be a fact that very often persons are operated upon, the Surgeon giving them a general idea of what the operation may be, but not going into all the minutiæ of the operation. It has been said—and the most unmeasured terms have been used—that Mr. Brown has been guilty of falsehood. Now, sir, let us look at the case exactly as it is. Let us understand what took place before the Commissioners of Lunacy. An article appears in the *Times* calling the attention of the Lunacy Commissioners to Mr. Brown's practice. As the result of that, we find a few days afterwards that a letter is addressed to Mr. Brown, and he is asked to give his opinion with reference to certain people who have been taken into his Home and operated upon for being of unsound mind. And what is more, the House-Surgeon is brought forward, and he admits positively that sometimes people of unsound mind were taken into the Home. What does Mr. Brown say? Does Mr. Brown say that he has not taken in any cases? That is the main point, and the wisdom of the lawyer proved it so. He merely says this—"That during the past year"—those are the words—"during the past year——"

Dr. Wynn Williams—"Ever——." (Cries of "Read, read.")

Dr. Routh—"I have no hesitation in stating, as Senior Surgeon and founder of the London Surgical Home, that the institution is not a Home for the reception of females of unsound mind; and in no papers or advertisements issued or published by authority has it ever been stated so." Now, sir, what is an institution that is open for the reception of insane persons? I really think you must look to the meaning of words. After all, we can only speak according to English. What is an institution open for the reception of insane persons? As I read it, it is a lunatic asylum, according to the plain English construction of phraseology. Put it before any person you like who is accustomed to write according to orthographical rules. I maintain, as far as that is concerned, Mr. Brown is perfectly right. The authorities have never stated that that Home was open as a lunatic asylum. I do not say that altogether the thing admits of a perfectly clear interpretation, but every man, I think, would have done pretty nearly the same thing if he had fallen into the same difficulty. I say I admit that; but I do not think it is justifiable to turn round upon Mr. Brown in this way. I think the Council are in error. They ought to have rather passed a vote of censure, after full, free, and entire investigation of the question, against Mr. Brown. If they had done so, Mr. Brown no doubt would have resigned, and we should have got rid of all this annoyance which has taken place, and which has been exceedingly injurious to the Society. I do not mean to say to-night that Mr. Brown has not been injudicious, that he has not been enthusiastic, that he has not laid himself open to several of the charges that have been brought; yet, inasmuch as I believe honestly—and certainly you will admit I have as much right to my belief as any other man—that he has acted more from ignorance as to what he really meant to do or to say than from wilful malice, I feel, as a man who would wish to follow the attribute of mercy and consideration towards a fellow-man, that I should not be justified in voting against Mr. Baker Brown, and in supporting the action of the Council. Consider—and now I appeal to you all, gentlemen—the extremely unhappy position in which you are going to place Mr. Brown. Consider the injury which you do personally to the man. Is the punishment not greater than the offence? If you will not consider Mr. Brown at present, consider what he has done for science; and there is nobody here present, not even his enemies, who will deny that he has done good in the profession. (Hear, hear.) Consider, lastly—and here I appeal to you as men of feeling—the injury you do by such a step to those who have

not erred with himself, and who are the members of his own family. Sir, I confess for my part, believing that I have the heart of a man, that I cannot bring myself to vote in favour of this motion. I cannot bring myself on this occasion to put my hand into that box against Mr. Brown. And bear this point in mind, that if we could be clean dissected, every one, there is no doubt whatever that many of us have been guilty—if not wilfully, at least by accident—of many an unprofessional act. ("Thank you; thank you.") I say, if not wilfully, nevertheless we have done it; and, under those circumstances, I should say, having in consideration the injury that you do to the man whom you wish now to ruin—(Oh, oh, no, no)—let the man that is perfectly pure and immaculate among you throw in the first ball.

Dr. Tyler Smith—I do not think any one could repeat without grave consideration the words uttered by Dr. Routh. It appears to me the great vocation of the meeting to-night is to defend women who have been and are liable to be injured by the practices in question. There are a great number of females in London, and scattered throughout the country, who are in this case, and I may say that for the last two or three years I have never gone into the country to see a patient without having complaints of cases made to me upon this matter of clitoridectomy. There are numbers of families where the husband is annoyed, and the wife made wretched for life, by this operation having been performed with or without the consent of the patient and her husband. Then there are a number of young women upon whom this operation has been performed without the, at all events perfect, knowledge of themselves and their relatives; and these young women are in as deplorable a condition as can be imagined. If they are honourable, should any proposal of marriage come to them, the parents are obliged to tell the parties proposing that they have been mutilated, and thus they are obliged to expose themselves to the possibility of being treated as imperfect persons. Now, I think our sympathy should be with women in this position and their friends, and not with those who are instrumental in producing such unhappy results. It appears to me that the two main matters which we have to consider are the performance of the operation upon married women without the consent of their husbands, and upon unmarried women without the knowledge of their friends and of the patients themselves. Now it is substantially admitted by Mr. Brown in the documents we have before us that this is his notion of right practice, and that he does not shrink from this responsibility. I say that we, the Council, have not entered into the question of clitoridectomy in itself; we have avoided this matter; we have confined ourselves to the consideration of the questions in ethics arising out of the mode in which it has been performed. (Hear, hear.) I have not heard from any speaker in favour of Mr. Brown, or from Mr. Brown himself, anything which could in the slightest degree justify the performance of this operation upon young women without their knowledge, or upon married women without the knowledge of their husbands. I pass by Dr. Routh's observations as idle as the wind. You cannot compare the case of a pregnant woman, or a case of syphilis, or the use of the speculum, with the operation of clitoridectomy. Clitoridectomy leaves her a different woman after the operation from anything she has been before. Dr. Routh had nothing to do with the pregnancy of the woman who confided her secrets to him.; it was no crime of his. (Laughter.) He does not participate in the crime by not revealing it to the husband; but if he is an operator in the case of clitoridectomy I maintain he is the faulty person. But on the last occasion I mentioned in this room that I had known cases where clitoridectomy had been performed under terrorism, where patients had been threatened that if they did not submit to this operation they would be become insane. Now, I want to hand you a letter from a distinguished practitioner in the country, confirming what I then said. It refers to an unmarried lady of rank. The writer says, "Permit me to say that the result of the operation was found unsuccessful; more than this, it has produced a great aggravation of the previous evil. At the time this operation was performed but little information could be obtained from reliable sources of its alleged value. We had to trust solely to the strong assertions of a person who we had every reason to believe would not advise a proceeding of this kind, unless certain of the good results that would follow. Moreover, the patient was told in my presence that unless she submitted to this mutilation she would soon be in a mad-house." It seems to me that this is as bad a form of terrorism as can be exercised upon a defenceless woman. (Hear, hear.) Now it appears to me that a main point in Mr. Baker Brown's speech or defence is, "If I have erred I will never do it again. Point out my fault, and it shall never be committed afresh." If we could believe Mr. Brown, I would not stand up upon this occasion. If we could believe Mr. Brown, I think it would be our duty to condone this offence, however great it may be. But what do I find? On January 31 Mr. Brown wrote his letter to the Council, withdrawing his offer of a Committee of Investigation. He withdrew it (note the date) on January 31. On February 4, Mr. Woollaston Pym, the Secretary of the London Surgical Home, wrote this letter to the Medical journals:—"I am directed by the two senior Surgeons, Mr. Baker Brown and Mr. Philip Harper, to state that, solely in deference to the opinion of the Medical press on clitoridectomy, they have determined not to perform the operation in this institution pending the Professional inquiry into its validity as a scientific and justifiable operation. An early insertion of this note in your journal will oblige." This appeared in the *Medical Times and Gazette*, the *Lancet*, and the *British Medical Journal*. Now, on February 21, Mr. Brown performed essentially clitoridectomy in the London Surgical Home, and I maintain that in doing so he was guilty of a breach of faith with every individual member of the Profession who had read that letter of Mr. Pym's. On interrogating the patient subsequently, she told me she did not know what had been done to her; that the nature of the operation had never been explained to her, nor had she been asked if she would consent to the operation. (Sensation.) Now, it seems to me that we cannot give credence to any promises that may fall from Mr. Brown. It appears to me that we must eliminate from practice clitoridectomy, as performed under the ethical conditions of Mr. Brown, or we really must fall down and become worshippers of Priapus. (Applause.) It appears to me the present occasion is one of the most solemn which have ever occurred in the history of the Profession. I know of no other occasion on which medical men have been thinking continuously for months, upon such a question of right or wrong—(hear, hear)—of ethical behaviour as the present. And it appears to me that we must either sink lower than the Profession has ever sunk, now the matter has been widely and thoroughly discussed, or we must really clear ourselves of this subject. If Mr. Brown could perform this operation alone—if he could go his own way—if he could separate himself from us—if we had nothing to do with it—we need not interrupt him. But we have to do with it. He stands not in his own strength; he stands as one of ourselves—(applause)—and we are bound, as it seems to me, to protest against the doctrines which he has urged as to this form of operation.

Mr. Baker Brown—I am sure you will allow me one word in reply to what has fallen from the last speakers, in all common fairness. With regard to the case Dr. Smith has related, and the letter he has read, a gentleman of Scarborough called me in to that case. I gave him my opinion honestly. I believed, and still believe, the patient was verging on insanity, produced by perpetual masturbation. He took time to consider, and she also. Two or three days elapsed; a nurse was sent for, and came down from London; and then and there, with his assistance and sanction, the operation was performed. I gave my opinion as an honest man, that she would become insane unless the operation was performed. I believe that masturbation does produce insanity. Am I to be told that I exercised terrorism? I did not see that patient alone. I saw this gentleman who called me in to see her. I gave my opinion, and performed the operation which I thought to be right. But there was no terrorism; and no large fee taken, for I think I had only had ten guineas — certainly not more than twenty (a laugh) for the operation.

Dr. Tanner (of Brighton)—It appears to me we do not meet here for the purpose of discussing the mode of performing operations, neither do we meet as philanthropists, for the purpose of discussing Mr. Brown's moral character, or what were the intentions he had in performing those operations. (A voice: we do.) On the contrary, I assume we meet here as the gentlemen constituting a public body, who have emerged from the difficulties and clouds under which we lay during previous centuries, having achieved a position and satisfied the public that their health in our hands, as men of honour and gentlemen, is safe, and that we shall never presume to go beyond the bounds of what is right, nor at once haphazard, to say, "Because I think-so-and-so is right, therefore I will go and do what I think," until we have got something better than one's own poor judgment to go upon. I

take that which has been written and been proved; and if I have a question of doubt in my mind, I put it before a number of men belonging to such a Society as our own, to have their opinion upon it—before I implicate the whole profession by such conduct as Mr. Brown's.

Dr. BARNES—I will merely call to mind the fact that not one of the main charges has been touched upon by Mr. Brown or his friends. He expressly evaded the question I put to him. (Cries of enough, enough; divide, divide; and applause.)

The ballot was then taken, and at its close the scrutineers sent in the following report.—"We, the undersigned scrutineers of the ballot for the removal of Mr. I. Baker Brown from the Obstetrical Society of London, do hereby state that the following is the result:—

For the removal of Mr. Brown . .	194 votes.
Against the removal	33 "
Non-voters	5 "
Total	237

Thus it appears that the motion of the Council for the removal of Mr. Brown from the Obstetrical Society is carried by 36 votes above the required majority of two-thirds." The names of the scrutineers were appended—Dr. T. H. Tanner and Dr. Edward Parson.

The PRESIDENT—In accordance with the Rules, sec. 2, cap. 4.—"That if on a ballot taking place, two-thirds of the Fellows present shall vote for the removal, the President shall declare the fellow in question removed accordingly"—I therefore declare that Mr. Isaac Baker Brown is removed from the Fellowship of this Society.

Mr. NUNN proposed that a vote of thanks be given to the Council of the Society for their manly, and straightforward, and patriotic conduct of this painful affair.

Mr. CHANCE—I beg to second that. I think the thanks of the entire profession are due to the Council.

The motion was carried *nem. con.*, and the meeting separated.

LATEST INTELLIGENCE.

THE PRINCESS OF WALES.

THE Princess continues to suffer from the inflammation of the knee-joint, to which we have previously alluded, respecting the progress of which affection our information was quite correct, and that those journals which partially contradicted us were altogether in error. Medical men will readily understand that variations common enough in the progress of such a case will occur. During the week Mr. Prescott Hewett has been called in, and is now in attendance as well as Mr. Paget.

Medical News.

SCHOOL OF PHYSIC PROFESSORSHIPS.—On the 5th inst., the Royal assent was given to the School of Physic Amendment Act, which we have already given in full in our last number. By this Act Professors Law, Apjohn, Aquilla Smith, and Banks, are respectively re-instated in their Fellowships in the King and Queen's College of Physicians in Ireland.

DUBLIN OBSTETRICAL SOCIETY.—Twenty-ninth Annual Session, 1866-67. Sixth Meeting in the Rotundo, Small Room, down stairs (entrance by Cavendish-row), Saturday, 13th April. Tea at eight, chair to be taken at half-past eight o'clock. Communications—1. A. Walsh, Case of Ovariotomy; 2. S. L. Hardy, Case of Hematemesis in an Infant; 3. J. A. Byrne, Case of Fibrous Tumour of Uterus; 4. H. Gogarty, Case of Early Abortion, Retention of the Placenta and Phlebitis; 5. H. Kennedy, on Fever complicated with Pregnancy; 6. J. H. Sawyer (President), Three Cases of Anomalous Labour; 7. J. Ringland, Case of Retroversion of the Uterus complicated with a Fibrous Tumour.

ODONTOLOGICAL SOCIETY.—At the ordinary monthly meeting of this Society, April 1st, 1867—the President, G. A. Ibbetson, in the chair—Dr. Richardson exhibited and described various modifications of the Ether Spray Apparatus introduced by him; and C. Spence Bate Esq., F.R.S., read a paper upon the Dentition of the Moles (talpa europœa).

The Annual meeting of the Briton Medical and General Life Association was held on the 29th March. The Report stated that 3649 proposals had been received for £1,011,835 12s.; that 2947 policies had been issued, assuring the sum of £304,979 18s. 2d., and yielding in new annual premiums the sum of £26,252 12s. 4d.; the income had increased to £226,151 0s. 1d.; the claims for the year were £141,364 3s. 11d.; the balance of income over expenditure was £65,434 14s. 10d. Mr. Francis Webb occupied the chair; and, in moving the adoption of the report, said the gratification which it had always been the good fortune of the Board to experience on such occasions was somewhat alloyed and mingled with sorrow, through the loss by death of their late chairman, Dr. Barlow. The Directors had respected him as deeply on account of his talents and constant attention to the duties of the Board as for his kindness, courtesy, and gentlemanly qualities. They had also to deplore the loss of three of their trustees, and of Dr. Babbington, one of their consulting physicians. Although they had shared in that high rate of mortality which offices in general had experienced during the past year, there was no reason to look despondingly at the affairs of the Company. If the losses had been heavy during the past year, it must be remembered that the Association had carried over more than 42 per cent. of the receipts the preceding year. The doctrine of averages would readjust any little inequality of the kind. The progress of the institution appeared to be most satisfactory. Notwithstanding the fearful panic and consequent depression of last year they had received proposals for £1,000,000 and upwards, and had issued 2947 policies for £304,979 18s. 2d., producing £26,252 12s. 4d. in new premiums, being an increase of more than £1000 over the new premiums of the preceding year. The average of the policies issued during the year was £320, whereas that of the preceding year was £260, thus showing they were not only increasing in quantity but in the quality of their business. Their income had increased to about £226,000, and their investments were all of a safe and highly satisfactory character. One other circumstance which appeared hopeful for the future was the increased assistance and the constant help they obtained from the medical profession. Each week showed how heartily and cordially the medical profession throughout the whole of England were helping the Association, and how entirely correct were those who represented them here in London in the New Equitable in assuring the Directors that when the office was thoroughly understood, such would be the result. After referring to the indisputable whole world policy now granted by the Association, and to the brightness of the future prospects of the Company, he concluded by moving the adoption of the report. Dr. Tyler Smith seconded the adoption of the report, which was carried *nem. con.* The retiring Directors and other officers were re-elected; a dividend of 8 per cent. was declared; and after the usual votes of thanks had been passed to the consulting physicians, surgeons, consulting actuary, district managers, and agents, to John Messent, Esq., the actuary and secretary, and to the chairman, the meeting separated.

NOTICES TO CORRESPONDENTS.

Inquisitor.—Certainly a Licentiate of the College may sign himself physician and surgeon if he thinks fit. The midwifery licence qualifies fully.

A Subscriber and Well-wisher is thanked for his suggestons. We are alive to the orthographical inelegancies of the contributions referred to, but we do not consider ourselves called upon or even entitled to correct them. The task would be endless, and would involve us in responsibilities which should properly attach to the contributor. We have to exercise a certain amount of supervison to see that communications are intelligible and of scientific interest, but we can go no further.

☞ Owing to a press of matter several important communications are unavoidably postponed until our next issue.

BOOKS RECEIVED.

The Royal London Ophthalmic Hospital Reports, Parts iii. and iv. Vol. V.
The Pharmaceutical Journal for April.
Journal of Cutaneous Medicine. Edited by Erasmus Wilson, F.R.S.
Popular Science Review. No. 23.
A Chapter on Vivisection by Dr. Scoffern.
The Glasgow Medical Journal. Nos. 11 and 12.
Annual Report of the Devonshire Hospital for 1866.
Report of the Sauerake Cottage Hospital, 1866.
The Register-General's Report.
La Médecinal Contemporaine.
The British Journal of Homœopathy.
The Monthly Homœopathic Review.
The Journal of Mental Science for April.

LIQUOR CARBONIS DETERGENS,

OR

CONCENTRATED ALCOHOLIC SOLUTION OF THE ACTIVE PRINCIPLES OF COAL TAR.

To prepare the Emulsion of Coal Tar, which is applicable to all domestic and therapeutic purposes,

Take Liquor Carbon. Detergens ... ... 1 part.
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The following well-authenticated cases will sufficiently show the value of the results effected:—

Gangrenous Sore.—Deodorisation at will with the compresses impregnated with the Emulsion at a strength of one-fifth; *rapid cure.*

A Wound consequent upon two large Carbuncles; fetid odour.—The same application was followed by immediate deodorisation; sleep restored after the first dressing; wound cleansed; speedy cicatrisation.

Ulcers of Leg, probably of Syphilitic origin.—Rapid improvement in the nature of the puriform secretion, with instantaneous relief; healing promoted.

Voluminous Anthrax.—The Coal Tar Emulsion at one-tenth changed the aspect of the wound, relieved the patient, and removed the slight odour emitted; the cure was more prompt than if ordinary dressings had been resorted to

Impetiginous Eczema of the Ears, with fetid secretion.—Instantaneous deodorisation, absence of pain, very rapid decrease in the abundance of the suppuration, prompt detachment of the crusts; cure effected in ten days.

Intertrigo of the Ears, with ulceration and copious puriform discharge.—Emulsion diluted to one-twentieth; sudden deodorization; cure effected in ten days.

Ozæna emitting a very offensive smell.—The patient discharged from a public establishment on account of the disease. Application of the remedy with a piece of lint, and sponge attached to a whalebone rod; prompt disappearance of fetidity, diminution of the suppuration and swelling; modification of the nature of the secretion; recovery.

Ulcerated Chilblains.—Emulsion diluted to one-fifth; rapid recovery, despite the persistency of cold weather.

Pedicularis capitis et pubis.—Lotions with the alcoholic solution; rapid destruction of the parasites.

Ulceration of the ankle of three weeks' duration.—Recovery after a single application of the remedy.

Adhesion and Retention of the Placenta after Parturition; marked putrid odour.—Injection into the uterine cavity of the Emulsion at one-fifteenth; deodorisation after one injection, which occasioned a very transient but sharp sensation of heat.

Chronic Inflammation of the Gums, with slight hæmorrhage.—Application of the remedial agent, diluted to one-twenty-fifth, with a tooth-brush; rapid cure.

Chronic Gleet four months' standing (male).—Injection in the proportion of 2 drachms to 8 oz. of water, used three times daily; after using the lotion the discharge increased, but altered in character; continued a few days longer (without any medicine); discharge completely stopped on the fourteenth day.

The Emulsion has been used with much benefit in cases of *"constitutional ecthyma,"* giving rise to fetid emanations.

Sold in Bottles, containing One Imperial Pint, at 4s. (Bottle included); and for the Use of Public Institutions Manufactories, Etc., in One Gallon Stone Jars, at 24s. each.

LIQ. CARBONIS DETERGENS.—We are very sceptical of the value of new remedies, and it was in a spirit of scepticism that we tried the liq. carbonis detergens. It is represented to be a concentrated alcoholic solution of the constituents of coal tar, and to contain all the active ingredients of the tar, to wit, benzine, naphthaline, and phenic acid. The addition of water, with agitation, makes a durable emulsion, in which the tar remains in a state of fine suspension, almost equivalent to solution. Our therapeutical experience of the preparation is very satisfactory indeed. In our hands it has been a most effective agent in the case of various skin diseases, especially of the chronic eczematous class; and one case of psoriasis which had resisted all other kinds of treatment speedily got well under the application of the *liquor carbonas detergens.* We esteem it a very valuable addition to our list of skin remedies, and worthy of a very extended trial by the profession. In the above classes of disease, and in various others, such as fetid ulcers, &c., the preparation is put into the form of soap. Messrs. W. V. Wright and Co., of Old Fish-street, London, are the manufacturers.—*The Lancet,* December 22, 1866.

PURE COAL TAR SOAP.

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SAPO CARBONIS
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LIQUOR ET SAPO CARBONIS DETERGENS.—These form a very valuable addition to our resources. The liquor holds in alcoholic solution the active principles of coal-tar, and is a most ready, cheap, and effective agent. It is valuable for all the medical and surgical purposes to which a deodorising or antiseptic wash can be applied; and, whenever it is desirable to correct fœtor, to arrest putrefactive action, and to cleanse a foul surface, the liquor, mixing readily with water, will be found most valuable. The soap contains a large proportion of this material, incorporated by hydraulic pressure. It answers its purpose admirably, and is the only true antiseptic soap with which we are acquainted. For medical men, especially those in attendance on lying-in women, those who frequent the post-mortem or dissecting-room, or those who are attending fever cases or handling wounds, its use will be of the greatest advantage. There are many forms of skin disease in which it would be useful, especially the chronic and parasitic forms. It is a very hard and economical soap for general use; it does not soften and waste in water as many soaps do; and it is pleasantly scented. Both the liquor and the soap are articles of great utility.—*British Medical Journal,* January 26, 1867.

It is a most economical Soap, and from the peculiarity of manufacture differs from all others. For daily use it will be found most refreshing, and, whilst it imparts a softness and clearness to the skin, it is calculated to ward off *Infectious Diseases.* We are most anxious to secure the recommendation of our medical friends, and hope they will give it a trial.

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Lectures.

LUMLEIAN LECTURES

DELIVERED AT THE

ROYAL COLLEGE OF PHYSICIANS OF LONDON.

By J. RUSSELL REYNOLDS, M.D., F.R.C.P.,

HOLME PROFESSOR OF CLINICAL MEDICINE IN UNIVERSITY COLLEGE, PHYSICIAN TO UNIVERSITY COLLEGE HOSPITAL, AND TO THE NATIONAL HOSPITAL FOR THE PARALYSED AND EPILEPTIC.

ON SOME OF THE RELATIONS BETWEEN MEDICAL AND LEGAL PRACTICE.

LECTURE III.

It has been already shown that medical testimony may fail of its legitimate effect, sometimes because it is not scientific, and sometimes because it is. The purpose of the present lecture is to prove that in the established mode of taking scientific evidence, and in the pitting—as it were—of one expert against another, scientific testimony virtually destroys itself. The theory upon which the production of expert testimony rests is this, that it should be such as to guide the jury. It is presumed that the juryman does not know certain things, and that with regard to them he needs direction from a scientific person. This he may obtain, or might obtain, if the evidence of experts were given as it was intended that it should be; but as a trial is now conducted, the jury is not guided by the scientific witness, but is asked to decide between a number of contending witnesses, each, presumedly, more learned than itself. In order to do this satisfactorily, each juryman ought to be wiser and more learned than each and all of the scientific witnesses. If he be so, it is a great waste of time, words, and money to produce scientific evidence; if he be not, it is absurd to ask him to decide such a disputed question between such disputants.

The points to be decided, for example, in opposed cases of claim for compensation on account of injury are those of diagnosis and prognosis, and a jury is asked to determine these points in very obscure cases, where and when the most learned doctors fail to see eye to eye. The injustice of such a proceeding is often very great; it is felt by all concerned in the inquiry; by plaintiff, defendant, scientific witness, counsel, judge, and jury.

The injured man is not fairly treated, or represented; for the accounts that are given of his state are those of many medical examiners, who have seen him at different times, under different circumstances, in divers places, and with opposite intentions. Each examiner on each "side" takes his own impressions, and conveys them to the court; and there is no free interchange of scientific thought between the contending witnesses. There is an undue reserve in the matter of consultation, and often what is termed a consultation does not deserve the name.

The expert is asked questions which he cannot answer positively; a line of defence is often set up so wide of the mark that it had not been previously considered; and the expression of honest scientific doubt is often made the means of doing great injustice.

The counsel, by being informed on one side only, often make confusion worse confounded; for they are dealing with matters that they do not fully comprehend, and often fail entirely in their attempts to perceive the points of difference between the scientific witnesses.

The judge is often entangled in a web of words from which even he cannot manage to extricate himself; and the onus of decision lies upon the unfortunate jury.

The jury is asked to make a diagnosis, and furnish a prognosis; and twelve unscientific gentlemen are requested to agree when half-a-dozen scientific gentlemen cannot do so, the points upon which they are to agree being precisely those with regard to which the doctors differ in opinion; the materials for their decision, moreover, being the statements that these doctors make. The juryman has to weigh not only facts but men, and to decide which witness is the most entitled to his credence. He must, under these difficult circumstances, make a diagnosis for himself; because he cannot rely upon either the age, experience, reputation, or skill of the opposing witnesses, for all these may be so evenly balanced, that they neutralise each other. The production of expert testimony is therefore so elaborate that it virtually destroys itself.

In order to meet the evils that have been enumerated, the following suggestions are made:—1st, That in all scientific evidence, there be a clear line of distinction between facts and opinions. 2ndly, That there be a clear statement on both sides of *all* relevant matter, and that due credit be given to opinions which differ from those of the particular individuals giving evidence. 3rdly, That the symptoms as described or felt by the patient be clearly distinguished from those observed by the physician; with regard to one set of symptoms, there is the testimony only of the plaintiff, with regard to the other there is the evidence of the expert. 4thly, That there should be constructed some fixed schemes or schedules for the observation of cases, analogous to those, for example, which are employed in life insurance offices. 5thly, That there should be some general professional agreement as to the use and meaning of words of constant occurrence in the common cases for medico-legal inquiry. 6thly, That the Profession abstain as far as possible from the attempt at prognosis, with the view of obtaining a more equitable mode of dealing with cases in which the future of the patient is the real point upon which the claim depends; such, for example, as the payment of an annuity, or the insurance of a life. 7thly, That commissions should be appointed to report upon the progress of science, and thus demonstrate the necessity for the removal of old and artificial lines of distinction. 8thly, That the question of the appointment of medical assessors to the Courts of Law, should be considered by the Profession, and its conclusion on that matter authoritatively stated. 9thly, That there should be the fullest and freest interchange of opinion between the witnesses on the two sides of a disputed case; it being believed, that by such a method of procedure nothing would be lost except what it would be well to lose, and that much, now quite unattainable, would be gained by our Profession and the public.

THE CROONIAN LECTURES

DELIVERED AT THE

ROYAL COLLEGE OF PHYSICIANS OF LONDON.

By Dr. ANDREW CLARK.

ABSTRACT OF LECTURE III.

The first part of Dr. Clark's third lecture was occupied by an account of the various experiments made upon animals for the artificial induction of phthisis, and by a critical review of their results. The modes of experiment performed by himself were four. The first plan consisted in keeping animals in conditions unfavourable to health; the second, in causing them to inhale irritating matters with the air; the third, in injecting various matters into the veins; and the fourth, in inoculating with grey tubercle, as first successfully practised by M. Villemin. The result of the first plan was the development in the lungs of yellow lumps which rapidly coalesced and converted the lung into a cheesy-like mass. These lumps were in the beginning composed of epithelium-like cells in various stages of endogenous development or molecular decay, and closely resembled lobular masses of scrofulous pneumonia. They were one of that large variety of lung deposits to which the term TUBERCLE was so vaguely applied, and whose claims to the title *tubercular* would be discussed further on. The second plan, less satisfactorily executed than either of the others, yielded less uniform and definite results. The most common effect was a sort of fibrous disease of lung with cheesy

deposit, resembling in character, though never equalling in degree, the pathological changes induced in the lungs of masons, miners, grinders, and others by the inhalation of irritating particles. The injection of cuttle-fish powder or of sand into the veins was followed by the appearance in both lungs of spherical masses of a yellowish or greyish colour, varying in bulk from the size of a mustard seed to that of a pea. These masses were composed chiefly of cells like the white cells of the blood, having some portions of the injected matter in their midst. When cuttle-fish powder was used, it was readily disintegrated and absorbed, but previous to its final disappearance the crystalline forms contained in it were often found to have made their way from the blood-vessels through the lung to the pleura, upon whose surface they could be felt or seen. *Secondary deposits were sometimes found in the liver and kidney.* When sand was used, the lung deposits produced by it were less frequently absorbed ; and in the lungs of dogs whose veins had been injected nine months before, yellowish-grey nodules were found, distantly resembling the grey granulation of man, but quite distinguishable from it by its physical and microscopic characters. In fact, these lumps were nothing more than groups of vesicles, affected with one of the two structural varieties of pneumonia already described. But by far the most interesting and important experiments were those of inoculation, first successfully practised by M. Villemin, and repeated immediately afterwards by Dr. Andrew Clark. When pieces of fresh grey tubercle were introduced into a subcutaneous wound in the neck of the rabbit, a hard swelling, often going on to suppuration, formed at the spot in three days, whilst, in the course of a fortnight or three weeks, grey granulations appeared in the lungs, and afterwards in other organs of the body. Similar results ensued in other rabbits when the inoculating material was taken from the swelling in the neck of a rabbit previously inoculated with grey tubercle from man. The tubercles thus produced in the lungs of rabbits had nearly all the naked-eye characters of the true grey granulation. They projected from the cut surface of the lung ; were semi-transparent, dense, tough ; and appeared to exist in all parts of the lung indiscriminately. They were, therefore, quite distinct from the masses indifferently called yellow tubercle, which was a common stage in the history of the most various products from grey granulations to pus ; and they were quite distinct also from the nodules of scrofulous pneumonia already described as common to the rabbit when placed in conditions with respect to food and air, unfavourable to health.

So far, then, as concerned the production of grey tubercles in the lungs of rabbits by the insertion of pieces of grey tubercle into subcutaneous wounds in their necks, Dr. Clark could testify, from repeated trials, that the experiments of M. Villemin were conclusive. But when it was inferred from these experiments that the grey granulation thus induced in rabbits was identical with that occurring in man, and that the grey granulation was the specific local expression of a specific virus capable, like that of syphilis, of being indefinitely propagated by inoculation. Dr. Clark held that the conclusions were not justified by the evidence adduced in their favour, and must be received with extreme reserve. The grey granulation of the rabbit differed in some important points from that of man. The former occurred as commonly at the base as at the apex of the lung ; it was seldom, if ever, seated in the areolar tissue surrounding the bronchi and blood-vessels, or in the substance of the pleura ; it was cellular instead of nuclear or corpuscular in structure ; it was often absorbed ; and as yet it had not been found to give rise to those secondary changes produced by the grey granulation in the lung of man. And, even admitting that the grey tubercle produced in the lung of the rabbit by inoculation was structurally identical with that of man, or homologous with it, it did not follow that its presence was due to the action of a specific virus communicable by inoculation, in the strict sense of that term. For, first, the experiment consisted in the introduction into a subcutaneous wound of pieces of grey tubercle, which there decomposed and gave rise to great local irritation ; and this, therefore, was no mere affair of ordinary inoculation. And, in the next place, Dr. Clark had twice succeeded in producing grey granulations by using for inoculation non-tubercular instead of tubercular matters. Moreover, if tubercle were really inoculable in the sense that syphilis was, the disease would be more communicable from husband to wife, more extensively hereditary, and much more common than happily it is among men engaged in studying the morbid anatomy of phthisis.

Years ago a true inoculation was tried for the induction of tubercle by Klencke, among others. But it was plain, from such accounts of the results as had come down to us, that the lesions met with in the lung were not true grey granulations, but the so-called yellow tubercles or islets of scrofulous pneumonia, which was the peculiar disease of the lung of the rabbit, and had, in all probability, occurred in the cases referred to independently of the act of inoculation.

Dr. Clark considered it of the utmost importance to the right interpretation of the results of these experiments to keep before the mind the absolute distinction which exists between the grey granulation and the so-called yellow tubercle. Without the light of this distinction, there was no way out of the obscurity in which the subject was involved.

NOTES OF A LECTURE ON DISEASE OF THE JOINTS.

By HOLMES COOTE, F.R.C.S.,

SURGEON TO ST. BARTHOLOMEW'S HOSPITAL.

In speaking of inflammatory diseases of the articulations, I wish it to be distinctly understood that there are but two structures which admit of primary inflammation—namely, the synovial membrane and the articular extremity of the head of the bone. Of the former we have a familiar example in the case of hydrops articuli ; of the latter, in the case of ulceration of articular cartilage. But this latter term is falling into disuse, for the ulceration of the cartilage depends upon a morbid condition of the cancellous tissue of the bone, and is consequently a secondary affection. Hence this group of affections is divided into "synovitis" and "disease of the joint ;" the former for the most part transitory and easily managed, the latter more obstinate and attended with severe pain. It may be readily surmised how tardy is convalescence in the second instance, for the part of the bone intended to support the weight of the body is no longer in a condition to perform that function ; it is painful and tender, and between its free surface and the cartilage now loosened there is a layer of exquisitely sensitive granulations. Hence the limb almost insensibly assumes that position in which there is the least amount of pressure between the opposed surfaces. In the case of the knee the joint is always flexed. In the further progress of such a case we find the ligaments softened by secondary inflammation, and they become elongated, so as to admit of displacement of the bones. During the acute stage any attempt at extension adds greatly to the patient's sufferings, and cannot, indeed, be borne.

The disease may be said to go on until the bone has recovered its healthy state, but it unfortunately often happens that before that time has arrived the articular cartilage has been in great part, if not wholly, destroyed ; and then we meet with those cases, so common in the Hospital, where the patient recovers with a bent and deformed limb.

In former times a bent limb was often amputated as a useless and inconvenient appendage, but we have now two methods of correcting the deformity ; one by forcible extension, the patient being rendered insensible by the use of chloroform ; the second, a painless proceeding by means of gradual extension, and although cases occur in which one proceeding may be demanded in preference to the other, yet I prefer, as a rule, the gradual extension.

You cannot form any estimate of the amount of laceration of internal parts when force is used, and structures may be damaged which you wish to preserve.

Those cases which do not yield to forcible extension are cases of bony anchylosis—a somewhat rare occurrence—and you may generally ascertain whether the obstacle be bony or not by pulling at the limb. In the case of osseous anchylosis, the parts being immovably fixed, there is no muscular contractions in the muscular structures around. In the case of fibrous anchylosis, the more common form, there is some amount of yielding, and the surrounding tendons are felt to spring from their sheaths on the application of extending force.

In the event of the tendons opposing any serious amount of resistance they may be readily divided subcutaneously; but this is a measure rarely necessary in the young.

You are aware that I am no advocate for the resection of diseased joints. The successful results which are brought about by soothing remedies, rest, and by patience, have been amply illustrated by cases which you may see in the hospital.

We cannot always arrest morbid action; but we may keep the limb in that position which is easiest to the patient, and thus favours recovery. The restoration of the limb to its proper form is a matter of later consideration.

Original Communications.

ON DREAMING, CONSIDERED ESPECIALLY IN RELATION TO INSANITY.

By THOMAS MORE MADDEN, M.R.I.A.,

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(Continued from page 333.)

INDEED, it must, I think, appear most probable that as long as vitality remains there can never be a complete cessation of thought; and the mind, during sleep, as well as during the waking state, continues to operate, even though in the former condition the consciousness of its operations be suspended, and though the mind may then act faintly or imperfectly; or, perhaps, in a totally different way from that in which it acts during the waking state. Every one who has had occasion to sit up with invalids, and to watch them during sleep, knows that dreamers are seen to toss about in bed, to express various emotions in their countenance, are heard to moan and talk in their sleep, and are known to enact their dreams, as in the case of somnambulists, all without any recollection whatever of having dreamt, and such persons, when they are aroused from a dream in which they have given manifest signs of their state, will often insist that their sleep has been perfectly calm and undisturbed.

It is evident that the condition of the mind of a dreamer, must be very different from the mental state of the same person when awake. In the latter case the current of thought (except when the individual is absorbed in deep reverie, which is a state very analogous to dreaming) is influenced and modified by the constant succession and change of external impressions transmitted by the senses. But in sound sleep all impressions from the external world are either entirely shut out, and the mind is no longer in any degree under the dominion of their suggestions; or else, as is perhaps more frequently the case, these impressions are so faintly or imperfectly conveyed as to produce sensations and results altogether different from those they would have occasioned in the waking mind.

The laws of association of ideas, which have been applied by metaphysical writers to explain the nature of dreaming, cannot be accepted by physiological inquirers as affording any satisfactory insight into the character of this remarkable condition. For, even in the waking state, as must be obvious to every one, ideas frequently arise perfectly unconnected with any preceding train of thought, and not suggested by any cognizable external cause. It seems, I think, indubitable that the same must occur in dreams, in which state impressions or ideas, probably long existing in the mind, although obscured by more recent impressions may, when, as is the case during sleep, the thoughts with which we are occupied are suspended, be renewed by the uncontrolled imagination acting on the memory, and bringing up before our mental sight images as distinct, for the time, as when they were orginally imprinted on the mind. Such a renewel of former mental impressions, variously combined, constitutes a dream.

The theory advocated by Spurzheim, that dreams are occasioned by certain organs of the cerebrum remaining awake while all the other portions of the brain are in the sleeping condition, affords the most plausible explanation of the *remote* cause of dreaming. This hypothesis may be easily amplified if we admit the conjecture that the exhaustion of nervous power which occasions, and is repaired by sleep, is seldom, if ever, complete; and that the unexpended nervous energy acting on the organ of the mind gives rise to dreams. The character of the dream in each case being, perhaps, influenced by some physical impression made on the waking part of the brain, and transmitted to it by the nerves from distant parts of the body.

Impressions, however, may also originate from within the brain itself, as well as be transmitted to it from without. That such may be the origin of some dreams is more than probable for such, as far as we know, is the nature of those sensations, for example, which patients who have undergone a capital operation, occasionally refer to limbs which no longer exist. Of a character, too, are those hallucinations of the organs of special sense that occur in the course of many febrile and nervous complaints, and also in some chronic maladies. These false perceptions of taste, sight, and hearing, occasionally commence in dreams, although they may be continued into, and influence the waking senses. Thus, for instance, a gentleman under my care suffering from dyspepsia, dreamt one night that he was compelled to eat *mal gre lui*, a quantity of molasses, and on awaking perceived an intensely sweet taste on his palate. This lasted for eight or ten days, and for that time altered and perverted the flavour of everything the patient ate or drank. A somewhat similar case is recorded by Dr. Millingen in his "Curiosities of Medical Experience" (p. 311), in which the sense of vision was effected by an hallucination commencing in a dream. Closely related to this part of the inquiry into the nature of dreams, a subject of considerable interest in connection with the medical jurisprudence of insanity presents itself. In his well-known work on "Obscure Diseases of the Brain," Dr. Forbes Winslow narrates several instances in which dreaming appears either directly or indirectly to have led to the commission of serious crimes of various kinds. "A person," says this eminent psychological physician, "apparently well, has gone to bed without manifesting the slightest tendency to self destruction, and on being suddenly aroused from a frightful dream has destroyed himself."(1) The same author also refers to some cases in which murder was apparently committed under the influence of dreams. And, in a communication I had the honour to read before this Society on the 21st of March, 1866, I made some observations on a very remarkable case of a somewhat similar character to those described by Dr. Winslow.(2)

III. VOLITION NOT NECESSARILY SUSPENDED DURING SLEEP.

We find it asserted by some physiologists that the essential character of sleep is the suspension of volition. But this proposition is far from being generally true,

(1) Dr. Forbes Winslow "On Obscure Diseases of the Brain, and Disorders of the Mind," p. 592. London, 1861.

(2) Dr. Thomas More Madden "On Insanity, and the Criminal Responsibility of the Insane," pp. 15, 16. Dublin, 1866.

unless, indeed, we admit that dreaming and sleeping are two separate states of existence. For although the power of controlling and changing the subject of our thoughts is generally suspended in dreams, yet there are many and striking exceptions to this law recorded, especially by Abercrombie and Reid, in which the dreamer had the power of stopping a dream at a particular point. And, even without referring at all to the question of somnambulism, another objection to the theory that volition is of necessity lost during sleep is presented by the well-known phenomena of incubus, or night-mare, in which volition, although without the power of executing the act willed, appears to be exerted. Dryden has so admirably rendered Virgil's description of this state that I cannot refrain from quoting it :—

"And as when heavy sleep has closed the sight
The sickly fancy labours in the night,
We seem to run; and destitute of force,
Our sinking limbs forsake us in the course:
In vain we heave for breath, in vain we cry;
The nerves, unbraced, their usual strength deny;
And on the tongue the faltering accents die."
(Æneid B. xii., L. 908.)

In such dreams it is evident that it is not volition, but the power of co-ordinating the movements which are willed that is suspended by sleep. The cerebellum in dreams being probably quiescent while the cerebrum is active, and therefore no voluntary action can respond to the exercise of the will.

IV. Character of the Visual Impressions of Dreams.

It is a generally received opinion that the impressions of visible objects seen in dreams are effected in the retina, from which they were originally, at some previous time, transmitted to the brain, and thence are returned during the dream by the optic nerve, and produce their impression on its occular expansion. If this theory were correct, however, it would be impossible to explain the phenomena of dreams in persons born blind, or in whom the retina has been destroyed by disease, and who, nevertheless, continue to dream of visual objects. It therefore seems, I think, more probable that the visible objects of dreams are independent of the ordinary channels of vision, and are produced directly within the sensorium.

V. Sleep-talking

Into the question of somnambulism I shall not attempt to enter on the present occasion, as the subject is too extensive. But I should gladly, if I should ever have the time and opportunity, for so doing, treat of it as a distinct and most interesting subject of investigation. I may remark, however, that in the state of sleep-talking, which is a form of somnambulism, it appears as though the mind had regained its command over the voluntary muscles which are connected with the vocal organs, and that these respond to the will, and perform their accustomed functions in proportion to the vividness of the dream as well as the strength of volition and state of health of the dreamer, being most energetic when the sleeper's health is most delicate. In those rare cases in which the dreamer responds to questions, and to a certain extent is capable of entering into conversation while still asleep, the person's condition is evidently that of partial or imperfect sleep. For not only is the external impression transmitted through the portio mollis of the seventh cerebral nerve in the ordinary manner, but, moreover, it produces its ordinary action on the portion of the brain connected with the sense of hearing and volition is excited and transmitted to the voluntary muscles of the parts by which the response is made, thus clearly showing that these organs are not under the dominion of sleep.

VI. Transitory Character of the Mental Impressions Made by Dreams.

The evanescent nature of the impressions made on the mind by dreams is a matter of familiar observation. It is nearly always exceedingly difficult and generally, indeed, impossible to recall to memory an hour or two after we awake the very subject of even the most vivid dream; and when we do succeed in recalling the subject our recollections are generally vague, indefinite and obscure. This very curious fact, has, I believe, never been in any way accounted for. The only condition that appears to present an analogy in this respect to dreaming, is the state produced by the action of certain stimulating narcotics, such as alcohol, opium, and chloroform, under the influence of which acts are performed and things are suffered of which no trace at all (or at any rate one as indistinct as the recollection of a dream) is left on the memory when the effect of the drug has passed off.

VII. "Sleep-inducing Hallucinations."

Under the above name, Mons. Maury and other recent French writers on this subject describe a form of spurious dreaming which presents a very close analogy to insanity, and that which M. Maury states is very common even in persons whose mental as well as bodily health are equally good. These "sleep inducing hallucinations," as they are called, consist of spectra, which appear before the mind just at the moment of sleep, and which, according to M. Maury, are reproduced in the ensuing dream.(1) My own observations, however, lead me to think that this phenomena is not so commonly met with as the writer I have just referred to supposes. In fact, of the very large number of persons I have questioned on this subject very few indeed were conscious of these "presomniferous hallucinations." I know one person to whom they sometimes occur, but as far as he is conscious of are never reproduced in the succeeding dream. Occasionally these hallucinations are so vivid that the delusion continues even after the eyes are open. Some months ago after having passed a restless night, this individual was dozing off towards morning, when in the transition state between sleeping and waking, two spectra, whose faces he felt quite familiar with though they were of collossal size and were clad in the costume of last century, appeared standing one at each side of the foot of the bed, over which they leaned upon their halberds. To assure himself that he was not dreaming, he opened his eyes and sat up in the bed, but the hallucination still continued for some time as distinctly as before, and then suddenly disappeared. This case presents a good example of the close resemblance between the phenomena of the state just described and insanity. Here was an impression produced by a hallucination on one of the senses, which was as vivid, for the time, as if it had been produced by an objective cause, and had this hallucination extended to the other senses, and if the person had not been able to reason rightly that this impression was unreal, the illusion would have become a delusion, and the individual would have been insane. So nearly do the confines of sanity and insanity approach in dreams. The individual to whom the foregoing hallucination occurred explained it by "the Laws of Association," as laid down by the Rev. Dr. Wills. For, the day after the dream I have spoken of, this gentleman visited the exhibition of the Royal Dublin Society, and there, to his surprise, recognised the figures he had seen in his dream in the mutes in Mr. —— excellent painting of "Goldsmith Mourners," which, he says, must impressed itself on his mind at a preceding visit, although he could not recollect having seen it before.

The most noticeable points of resemblance between dreaming and insanity are the loss of all power of discriminating between the possible and the impossible, the absence of surprise at the most astonishing scenes and events, and the ready credulity with which absurd contradictions and impossibilities are quietly accepted by the mind as facts. Another peculiarity of the mind in dreaming, is want of consecutiveness, and connexion between the various dreams which succeed each other, the mind passing with ease from one subject to another in no way connected to it in the same manner as it also does in insanity.

(1) Le Sommeil et les Rêves, &c., &c., par M. L. F. Alfred Maury, Membre de l'Institut, Paris, 1862.

VIII. OCCASIONAL MANIFESTATION OF MENTAL POWER DURING DREAMS.

One of the most remarkable phenomena in connection with dreaming is the occasional manifestation of intellectual activity by persons in this condition. Though this fact is doubted by some psychologists, and amongst others by Rosenkrantz and Baron von Feuchtersleben, who asserts that "intellectual problems are not solved in sleep, because intense thought is without images, whereas dreaming is a creation of images."(1) This assertion, however, is directly opposed to many well-known cases, in which the full powers of the mind have been exercised by persons apparently in a sleeping condition.

Sir Thomas Brown goes so far as to believe that "Sleep is the waking of the soul; the ligation of sense, but the liberty of reason." Condillac states that while engaged in his "Cours de Etude," he frequently developed and finished in his dreams a subject which had engaged his attention when he retired to rest. Condorcet had presented to him in sleep the solution of a difficult calculation that had puzzled him all the preceding day.

"Nous avons quelquefois," says Cabanis, "en songes des idees que nous n'avons jamais eues. Nous croyons converser, par exemple, avec un homme qui nous dit des choses que nous ne savons pas. J'ai connu un homme trés-sage et tres-éclaire (Franklin) qui croyáit avoir éte plusieurs fois instruit en song de l'issue des affairs qui l'occupaient dans le moment." Cabanis accounts for this by supposing that the mind continues to occupy itself in such cases with its waking thoughts, and continues these with the fictitious creations of the dreaming imagination.(2) The same thing is said to have occurred to Brindley, the engineer, when constructing the Bridgewater canal. Dr. Gregory, too, stated that he found his dreams often occupied by thoughts and arguments "so just in point of reasoning and so good in point of language" that he made use of them in his lectures.

Goethe says in his *Memoirs*: "The objects which had occupied my attention during the day often reappeared at night in connected dreams. On awakening, a new composition, or a portion of one I had already commenced, presented itself to my mind. In the morning I was accustomed to record my ideas on paper."(3) In Lord Jeffrey's life it is stated that this judge of unenviable notoriety entertained a somewhat similar opinion. "He (Lord Jeffrey) had a fancy that though he went to bed with his head stuffed with the names, dates, and other details of various causes, they were all in order in the morning, which he accounted for by saying that during sleep they all crystallized round their proper centres."(4)

The well-known history of the composition of Coleridge's poem of "Kubla Khan" during sleep may also be here cited as a further illustration of my statement. We read that in the summer of 1797 Mr. Coleridge, being then *in ill health*, was rusticating in a quiet farm-house in the country. On one occasion, having previously taken an anodyne, he fell asleep in his chair, while reading in "Purchas Pilgrimages" a passage referring to the Khan Kubla. He slept on for three hours, and during this time, as he subsequently asserted, he had the most perfect confidence that he composed from two to three hundred lines of poetry whilst still asleep, and did not experience the least consciousness of effort in so doing. When he awoke he had a perfect recollection of the whole poem, and instantly wrote down the fragment which exists of "Kubla Khan." But whilst thus engaged he was called out of the room for about an hour, and on his return he found that he had lost all distinct recollection of the poem, although he still retained a dim consciousness of its general purport, and even remembered a few scattered lines.(5) The late Sir B. Brodie (in his "Psychological Inquiries") relates a somewhat analogous case, in which a friend of his, whose mind had been deeply occupied with some abstruse scientific point, about which he failed to satisfy himself, imagined that the matter had been cleared up suddenly in a dream. It would be easy to add to these cases, but enough has been said to prove that the exercise of mental power is not incompatible with the sleeping state.

It must be admitted, however, that such cases as the foregoing are comparatively rare exceptions, and that the faculties most commonly exercised in dreams are the memory and the imagination, unbridled by the judgment.

The sense of the ludicrous is occasionally highly developed in dreams. I know a gentleman who seldom indulges in a pun when awake (although when he does attempt them they are generally good), but when asleep he frequently fancies that he has made a capital pun, which amuses him exceedingly at the time, though on recalling—which he can always do in the morning—he finds that it is very far from being as witty as he had supposed.

Sir Thomas Brown thus recorded his own experience on this subject—"I am in no way facetious, nor disposed for the mirth and galliardise of company; yet in one dream I can compose a whole comedy, behold the action, apprehend the jests, and laugh myself awake at the conceits thereof. Were my memory as faithful as my reason is then fruitful, I would never study but in my dreams, and this time also would I choose for my devotions; but our grosser memories have then so little hold of our abstracted understandings, that they forget the story, and can only relate to our awakened souls a confused and broken tale of that that hath passed."

(To be continued.)

(1) Von Feuchtersleben, "Medical Psychology," p. 167.
(2) Cabanis, "Rapports du Physique et du Moral de l'Homme," 8th edition. Paris. 1844. P. 574.
(3) Goethe's "Memoirs," p. 126. London. 1824.
(4) Lord Cockburn's "Life of Lord Jeffrey," vol. i., p. 243 (note).
(5) "Coleridge's Poems," Adeline edition. London. 1848. P. 214.

PSEUDO-HELMINTHOLOGY: OBSERVATIONS ON CERTAIN SUBSTANCES LIABLE TO BE MISTAKEN FOR INTESTINAL WORMS.

By Dr. WM. FRAZER, M.R.I.A.

HONORARY MEMBER OF THE MEDICO-CHIRURGICAL SOCIETY OF MONTREAL, ETC.

Cells of Orange Pulp mistaken for Entozoa and for Hydatids.—Three examples of this curious mistake have occurred to me. The first was referred for investigation some years ago from the north of Ireland by a physician who wished to ascertain whether the strange substances his patient had passed from his bowels were hydatids, as their appearance had given rise to much uneasiness. When informed of their nature his reply was, "I beg to thank you for your kindness in examining the supposed hydatids, the patient has been using oranges, and you are perfectly correct."

The second case was submitted to me by Dr. Austen. A delicate child had got an active vermifuge under the idea of worms being the cause of her ill health, and undigested cells of orange pulp were discovered in the alvine discharges, these were alleged to be genuine intestinal worms, but doubts having risen about these supposed ascarides, he wished to have them examined. Dr. Austen's own impressions were opposed to their being worms, and his note in reply to my letter was, "You are perfectly correct as to the supposed worms, the child had eaten an orange or two for several days consecutively, the matter is really rather ludicrous."

In the third instance, a young gentleman of delicate appearance was brought me by Dr. Kirwan; he displayed some substances floating in a phial of water, which he had picked out of the evacutions, and believed he saw them *distinctly moving*, they were cell walls of orange pulp, the contents being quite digested. When told what they were, he admitted that he had eaten the fruit. He was suffering from impaired digestion, and complained of irregular action of the bowels.

Undigested Celery mistaken for Ascarides.—Some years since a gentleman brought me several long undigested fragments of celery stalk, chiefly consisting of the stringy

vascular tissue, which he fancied were worms, he had seen some ascarides lumbricoides passed by a child, and was convinced he was infested by them. The microscope showed their vegetable nature and rendered their recognition easy. It is not unusual for persons who have feeble digestion to excrete unaltered vegetable substances consisting of indurated vascular tissues or of sclerogen, and even the cellular portion of vegetables may pass off undigested, and it must be admitted in excuse for this patient's error, that the fragments of celery he mistook for entozoa were not unlike semi-digested ascarides.

Plastic lymphy intestinal exudation mistaken for Tape-worm.—In this distressing case a physician of great promise was attacked with plastic lymphy exudation of the intestines; he had suffered from griping abdominal pains and a train of nervous symptoms, when some fragments of lymphy matter being expelled, he was supposed to have tape-worm and advised to use drastic purgatives and anthelmintics, these had the immediate effect of aggravating his symptoms, severely injuring him and increasing the number and size of the expelled masses. The specimens that I examined were of pure white colour, seldom exceeding half an inch in length and of irregular shape, consisting of granular substance which passed into fibrillation on the surface that appeared to have been attached to the intestine. The lymphy fragments continued to form at intervals for several weeks until he left Ireland for a protracted sea voyage, and soon after his departure he ceased to pass these plastic masses.

Larvæ of Diptera supposed to be Worms.—In two instances, of which I have preserved no notes, dead larvæ of some fly were brought to me under the idea of their being intestinal worms, they were stated to have passed from the bowels, which was possible, though their presence might admit of other explanations.

Elastic-ligamentous Tissue supposed to be Tape-worm.—Some years ago a woman in the wards of the Hardwicke Hospital, under the charge of Sir D. J. Corrigan, fancied she was attacked with tape-worms, the alleged worms were submitted to me for microscopic examination, they proved to be a quantity of fragments of ligamentum nuchæ which she had eaten weeks previously, they lodged in the cœcum, causing distinct fulness in that region, and required repeated purging for their expulsion. This case was recorded by Sir D. J. Corrigan in one of the early numbers of the *Dublin Hospital Gazette*, and affords a good illustration of the value of microscopic examination in determining the nature of doubtful substances.

CASE OF DEPRESSED FRACTURE OF MASTOID PORTION OF TEMPORAL BONE:

WOUNDS OF PHARYNX, TRACHEA, THORAX AND ABDOMEN: RECOVERY.

By JOHN P. QUINLAN, Esq., L.R.C.S.I., etc., Borrisoleigh.

I was called out of bed on the night of the 14th of March, to attend a man named Carroll, about 30 years of age, who had been attacked about a mile from Borrisoleigh, on the road leading to Upper Chanto. I found, on arriving at the scene of the outrage, that he had been conveyed to a neighbouring house, having (as was evident on inspection in the morning of the road where he had been lying), lost a considerable quantity of blood. I observed on examination that he had sustained the following injuries.

Two scalp wounds, one on the right parietal bone, about an inch below and behind the anterior fontanelle. This was somewhat "eliptical in shape," running parrallel to the suggital suture, and presenting at its inferior edge a partially separated portion of integument in the form of a tongue-like prolongation as if the wound were inflicted with a two bladed instrument. The pericranium was exposed through nearly the entire extent of the wound. The incision was about an inch in length. The other, of somewhat similar extent, began immediately behind the ear, on the same side, crossed the mastoid portion of temporal bone rather in an oblique direction from below, upwards and backwards. The mastoid portion was broken off nearly in the line of the external wound. It was also depressed.

The face presented several incised wounds, one in particular beginning just at the ala of the nose on right side, and extending directly upwards to within about half an inch of the orbit, its course being parallel to the lateral cartilage, here it would seem that the weapon glanced off the superior maxilla, and caught again in the structures over the supra-orbital ridge after passing the eye-ball. The structures were divided down to the bone for nearly an inch in a direction upwards and outwards. This incision began about the situation of the pulley of superior oblique muscle, and the supra-orbital ridge of the frontal bone was slightly depressed. The other facial wounds were slight. On the right side of the neck I observed a clean incised wound crossing the sterno-mastoid muscle, in a transverse direction, about two inches above its sternal origin, and dividing its superficial fibres. On the left side was another, beginning about an inch from the symphisis menti, and extending along the ramus of the lower jaw, as far as the angle. The left side of the neck presented several incised wounds, completely dissecting up the integuments and subjacent structures, as low as the pomum Adami, exposing it and the submaxillary glands, but without wounding any important vessel, the cervical portion of the facial artery having escaped injury.

The trachea was perforated about its second or third ring, to the left side of the median line, and the separated muscular structures flapped considerably during respiration.

The pharynx also was wounded near its termination in the œsophagus. The fluid which the patient drank trickled freely through one of the wounds on the left side of the neck. There were five or six punctured wounds of the thorax, but, with one exception, none entered the cavity.

On examining the abdomen, I found six punctured wounds. I cannot say whether all entered the cavity, but one at least passed through the parietes, as I found the omentum protruded, to the extent of about an inch and a-half, through an aperture about an inch above and to the right side of umbilicus.

I found some sand from the road where he had been lying entangled in the folds of the protruded portion. This was very carefully cleansed before being returned. The other wounds were treated on ordinary principles. I visited him again next morning. The wound of the trachea seemed healed, at all events there was no longer the flapping of the integuments, which I have noticed as having been observed the previous night.

The pharyngeal wound, however, was still open, as fluids drank by the patient continued to escape. There was considerable disphagia and pain; he was now quite conscious.

Being obliged to attend the assizes in Nenagh, I recommended that he should be removed to Thurles, where his friends lived; here he was attended by Dr. Russell, with whom I visited the patient on the 23rd (March), and ascertained that the wound of the pharynx closed within three days after the receipt of the injury. The difficulty of swallowing also, which was at first such an urgent symptom, was also now entirely removed.

I learned also from Dr. Russell that he had not suffered from any inflammatory symptoms either of the pleuræ or peritoneum, and required nothing whatever but to have his wounds dressed in the usual way.

I saw him again on the 28th (March). He was then quite convalescent.

Cattle Plague.—The cattle-plague has again appeared in Northamtonshire, on the farm of Mr. Joseph Goodman, of Drayton Grange, Daventry. Sixteen of his beasts were slaughtered on the night of the 27th ult., and the local cattle-plague committee have declared his premises infected with an area of one mile from the boundary thereof. The disease, however, is not rinderpest.

Hospital Report.

RICHMOND, WHITWORTH, AND HARDWICKE HOSPITALS.

Dr. LYONS'S CLINIQUE.

ERYSIPELAS AS A SEQUELA OF TYPHUS.

Some remarkable examples of erysipelas occurring in the sequel of typhus fever have been presented in Dr. Lyons's clinique, illustrating the spontaneous origin of this latter morbid state, and its active communicability when once so developed. The occurrence of the erysipelatous tendency has been noted on two distinct occasions in the same ward, separated by an interval of nearly two months. In the first instance a patient recovering from well-marked spotted typhus, and suffering from a bed sore on the buttock which, however, healed kindly, presented without marked premonitory symptoms an erysipelatous blush on the face. The nose, eye-lids, fore-head, and head and face generally, soon participated in the morbid condition, and the patient's state for some days was such as to cause well-grounded alarm. Under the use of tonics (bark and ammonia), with liberal stimulants, the patient ultimately made a good recovery. As a disinfectant carbolic acid was freely sprinkled on the bed-clothes and the floor, and all means were adopted to limit the extension of the disease. When this patient was nearly convalescent it was found that a second typhus case began to exhibit erysipelas of the head and face. This latter case was remarkable for the extreme typhous prostration, and the dark colour of the rash it had presented, having been in fact an instance of the lowest form of putrid typhus, with extreme depression of the circulation and temporary obliteration of the cardiac impulse and first sound. That such a case, when not fully convalescent from the typhus state, should exhibit a pathological condition in many respects so different as erysipelas, is, in Dr. Lyons's opinion, not a little remarkable.

This patient ultimately recovered. In all, seven cases were affected with erysipelas in this first epidemic, of which one only died (of erysipelatous pericarditis.) The disease then disappeared from the ward, but in about two months subsequently again presented itself as the sequel of a case of pure maculated typhus. This case ultimately recovered. A second patient likewise went favourably through his primary fever, and the subsequent erysipelas, but a third case much worse, and with protracted diphtheria, partially developed an erysipelatous rash upon the face, which did not extend beyond the nose and adjacent portions of the cheeks. A day or two subsequently, metastasias to the heart took place suddenly; rapid pericardial exudation and serous effusion ensued, and the patient succumbed on the twenty-seventh day from the commencement of his fever (typhus.)

RENAL DISEASE—UNUSUALLY SMALL KIDNEY.

P. N., æt. 40, by trade a harness-maker, was admitted into the Whitworth Hospital on the 13th of February last under the care of Dr. Lyons.

It was ascertained that the patient had been long given to intemperance; after Christmas he drank for a fortnight, and subsequently was attacked with sore throat, puffiness about the eyelids, and slight swelling of the abdomen. He was a man of pale and anæmic appearance. His urine was found to be highly albuminous and of a clear colour. Dr. Lyons prescribed for him one fluid dram of the solution of Perchloride of Iron, in eight fluid ounces of water, half-an-ounce every third hour; and also twelve pills, of which two were directed to be taken every alternate night according to the following formula:—℞. Pil Rhei Co; Pil Colocynth, Co aa. gr. xxx; olei Crotonis gtt. ii. Misce. Further, a blister was applied to the throat; and this (we were informed) gave the patient much relief.

On the 14th of February the urine was of a very pale colour, and its specific gravity from that date to the 24th February was tabulated thus:—

S. G. 14th,	February	1008
17th	„	1010
18th	„	1008
20th	„	1008
21st	„	1007
24th	„	1008

On the 26th of February he was discharged much relieved; the swelling had quite disappeared from the eyelids and abdomen, but still albumen continued present in the urine

On the 1st of March he was re-admitted, having been again drinking during the three days following his discharge. He was then (1st March) found to have a sore throat, of which he complained most; he was anæmic as before, but had no return of dropsical symptoms. The heart's sounds were normal; the urine, of which he passed large quantities during the day, was albuminous of clear colour, and of S. G. 1008. He expectorated small quantities of blood; and was ordered the same treatment as on his first admission. No symptoms of an urgent nature showed themselves until the 12th of March, when he seemed to have caught cold. He could not get warm, and his nose became red and swollen. On the 14th he complained of pain in his stomach; and this pain shifted from the epigastric to the right hypochondriac region. He also complained of a general uneasiness. The pain was relieved by a linseed poultice. In the evening a very distinct double frottement was heard all over the præcordial region. Pain was felt on pressing in the left costo xiphoid space. There was not any tenderness over the heart; the pulse was 104, and strong. At this time he had a distressed look about his face; his breathing was still laborious and deep; while he felt very uneasy in bed he had no difficulty in lying on his left side; he was described as being "silly" in his manner, and drank a large quantity of water.

15th. The friction sound is still audible, and it is intensified by pressing a little with the stethoscope; the breathing is laborious and deep; the patient appears to be very uneasy with tossing about in the bed, and expectorates small quantities of blood; the pulse is quick. His face presents the appearance of great distress, and he complains of acute pain over the heart, which, he says, is "broken." Three leeches were applied over the præcordial region, and their application was followed by considerable relief to the patient.

16th. Distress in breathing, restlessness, tossing about in bed, and pain in the præcordial region continue. The friction sound is also still audible; mucous rales are heard all over the chest; pulse 92. Six leeches were applied over the heart, this gave some ease.

17th. At 6 a.m. he experienced great dyspnœa and expectorated frothy mucus. As on yesterday, there is every appearance of distress in his face; and mucous rales were audible over the chest; pulse 92, and total absence of delirium. He was ordered stimulants, and a linseed meal poultice to the leech-bites. Died at 6.50. a.m. more suddenly than was expected.

On making a post-mortem examination, Dr. Lyons found evidences of extreme, general, and acute pericarditis. A considerable amount of lymph had been exuded, and there were also found bands partly connecting the surface of the heart and the parietal pericardium. Traces of inflammation of the larynx were also discovered; the glottis was thickened, and was very red on its posterior inferior surface. One of the kidneys was in a state of advanced fatty renal degeneration. Its cortical portion was diminished, and the pyramidal portion was deeply stratified with fatty matter. The other kidney was extremely small, weighed under an ounce, and if divested of its fatty matter weighed only 359 grains. On making a section through this kidney, Dr. Lyons found it also to be in an advanced state of degeneration. He did not, however, think that its very small size could be accounted for by the progress of the disease in the other kidney; and in fact he could not then satisfactorily account for the difference between the two in this respect. In cirrhosis the diminished kidney was found to be hard, granular, on the surface, and otherwise differed in

appearance from the present case. He inclined to the view that it was simply an instance of a kidney originally ill developed, which, like its fellow, became attacked with disease, and its intertubular tissue became degenerated. He had no doubt, however, that it was smaller after the attack of the disease than it was before it.

In remarking on this case, he noted that the patient had gone on for a long time with scarcely any symptom of disease. For nearly three weeks before admission to hospital he worked at the trade of a harness-maker, having no idea of being in any way ill. Dropsical symptoms were absent; he passed light-coloured water, and suffered from a little headache, and these symptoms could be otherwise accounted for than by the hypothesis of his case being one of renal disease. The disease progressed rapidly; he suffered from laryngeal, and then from cardiac symptoms. Dr. Lyons exhibited the kidneys here referred to at a recent meeting of the Dublin Pathological Society.

TYPHOID FEVER WITH ENORMOUS ABDOMINAL DISTENSION.

W. B., a man of full age, was admitted into the Hardwicke Hospital under the care of Dr. Lyons, about the fifth or sixth week of his illness. From what could be ascertained of his history, his case was considered to be that form of typhoid fever, in which the fever in the first instance is comparatively insignificant, and in which the enteric lesion is not brought into activity for several weeks after the primary attack. On admission he was found to labour under great depression, and without entering into minute details of his case, it may suffice to say that its principal phenomenon was intense pain of the lower half of the abdomen, and distension of the whole abdominal cavity to such an extent as had hardly ever before occurred in Dr. Lyons's experience. He was placed under appropriate treatment, but died unexpectedly, and Dr. Lyons considered it desirable to make a post-mortem examination. On opening the abdomen there was an escape of noxious gas, and on proceeding further the intestines were found to be enormously distended. The colon was very large; the small intestines were also largely dilated; and they forced up the colon before them to a great height, so carrying the cœcum from its natural situation that it was dragged a couple of inches above the point at which it ought to have been found. It may be well to mention here that one chief object which Dr. Lyons had in making the post-mortem examination was to determine whether, under similar circumstances in similar cases, it would be possible to afford mechanical relief from without during life. With this view he performed an operation on the dead body in order to get access to the cœcum at the portion which lies uncovered by peritoneum, but failed to reach the intestine, in consequence of its abnormal position, as already detailed. Dr. Lyons was not aware that this operation had before been performed in the human subject with the view of relieving unnatural intestinal distension from without, but he stated that such had often been resorted to in the lower animals, with a like object. He mentioned a case of a similar kind to that now under consideration, in which a female had been taking for six months a large quantity of alum daily, with the view of preventing excessive hæmorrhage at her ensuing confinement. In that case the abdomen reached an enormous amount of distension. The next case which occurred to Dr. Lyons's memory was that of a man, who having been under medical treatment for a fortnight, suddenly turned towards the wall, and shot from his mouth a quantity of matter which reached almost to the ceiling of the room in which he then was. He died on the spot, and, in Dr. Lyons's opinion, from rupture of the intestines. In this last mentioned case the intestines were also enormously distended, and no post-mortem examination could be had. It was, however, observed that the arch of the colon was of immense size, the smaller intestines were also much swollen, and there was a large quantity of gas in the peritoneum. In the typhoid case, as before stated, the patient died unexpectedly, and the post-mortem examination (the details and facts of which we have above given) discovered a quantity of typhoid deposit in the solitary glands; and ten or eleven inches lower down there was a large amount of deposit in the glands of Peyer, which, in Dr. Lyons's opinion, affected the tone of the intestines, and so led to the generation of the large quantity of gas already noticed. The length of time which this man lived in a state of disease before his admission to hospital (five or six weeks), was also noted by Dr. Lyons, who stated that the man's friends had not considered his case at all serious, previous to his admission as above referred to. Dr. Lyons exhibited the morbid specimens in this case to the Dublin Pathological Society at a recent meeting.

THE MEDICAL ASSOCIATION OF THE COLLEGE OF PHYSICIANS, IRELAND.

The Association met at the College, in Dublin, on Thursday evening, 4th of April, to discuss the Dublin Hospital Reports respecting cholera, which had been read at the previous meeting. There was a very large attendance.

The President of the College in the chair.

The President said that since the last night of meeting a very important report had reached Dublin of a singular outbreak of cholera in the city of Utrecht, in Holland, which had been submitted to him by his friend Dr. W. D. Moore, with a short abstract; and it was the opinion of the Council that, looking at the great importance of this report, which gave an account of an outbreak of cholera in many respects analogous to that at Mountjoy Prison, recorded by Dr. McDonnell, it would be desirable, if Dr. Moore would be kind enough to initiate their proceedings by the reading of that report. Dr. Darby had also a report of the outbreak at Bray, but he would incorporate the matter of it in his speech that night.

Dr. Moore then read the following:—

Mr. President,—Two or three days ago, I received from Professor Donders, of Utrecht, the loose sheets of a recent number of the Dutch "Archives of Medicine," in looking through which I met with an interesting account, by Dr. Snellen, of a very remarkable outbreak of cholera, which occurred last year in a limited district of Utrecht, during the prevalence of that disease in an epidemic form in the city at large. It appears to me that this epidemic within an epidemic, if I may so speak, presents some points of resemblance to the very remarkable outbreak which occurred last December in the Mountjoy Prison, and which has been so ably described by Dr. McDonnell, and that it might be profitably taken into consideration in connexion with the report from the prison already in the hands of the members of this Society. I have, therefore, made a very short abstract of Dr. Snellen's communication, which, as you, sir, and the Council have kindly permitted me to bring it forward on the present occasion, I shall now read for this meeting.

LOCAL EXTENSION OF THE CHOLERA EPIDEMIC, UTRECHT, 1866. BY DR. H. SNELLEN.

Abstract of the above paper from the *Nederlandsch Archief voor Genees en Natuurkunde*, 1866, Deel 2. Aflevering 4. By W. D. Moore, M.D.Dub. et Cantab., M.R.I.A.

The first case of cholera occurred in Utrecht (the population of which is about 60,000) on the 6th April, 1866; the second on the 21st of the same month. The subsequent numbers were, up to the

11th June	... ...	224 cases.
11th July	... ...	1734 „
11th August	... ...	2221 „
The middle of September	...	2400 „

In the Gasthuis-steeg (Hospital Lane), the seat of the special outbreak now under consideration, the first case occurred on the 11th June, the last on the 6th of July. Seventeen per cent. of the population were attacked, and ten per cent. carried off by the disease. The course of the local epidemic extended over twenty-five days, before or

after which time not a single case occurred, although in other parts of the city cholera was met with from April, and continued to rage in the middle of September, the date of Dr. Snellen's paper.

The Hospital Lane is a passage connecting Bilt-street and the White Lady Counterscarp, and running from the north-east to the south-west. Its length is about 150 yards, its average breadth is only four yards, while, according to the building regulation, it should be at least eight yards. It is not a public way, the thoroughfare being in general closed against carriages. It contains, including the three courts connected with it, seventy-five houses, all of one story; eighty-three families, and 380 inhabitants.

The author enters into details respecting the several houses invaded by the disease, and their relation to pumps and privies, to follow him through which would occupy too much time. On the plan annexed to his paper the number of inhabitants in each house is represented by a corresponding number of circles, plain in the case of those who escaped the disease, black in the case of those attacked by it, and black with crosses annexed to represent patients carried off by cholera. The *plain* circles with crosses annexed, of which there are, I believe, only two in the plan, represent individuals who died during the twenty-five days, of other diseases than cholera: the plain circles outside the houses represent more recently arrived inhabitants; the pumps are marked by a double circle and an appendix; the privies are evident, the grates of sewers are marked by shaded parallelograms, the date connected with each patient indicates the period of his or her attack.

It may be well to quote a couple of examples to show the apparently capricious nature of this invasion of cholera. The author says:

"It was a meritorious work of the *Society for the Improvement of Dwellings* to purchase and considerably to improve the first block of houses, which was in by far the most wretched state. These four houses (148*a*, 149*a*, 150*a*, 151) were then raised some feet, as was the yard behind them, and good drainage was secured. We find here one good pump and two privies. The adjoining block—152-155—continues as low as before; the yard behind it is in general a pool; there is one privy, which does not deserve the name.

"It is remarkable that in the first block—in the now good houses—among the twenty-two inhabitants, four cases (eighteen per cent.) of cholera occurred, while on the other hand, in the block of unimproved houses, among the seventeen inhabitants, not a single case was met with.

"It now remains to examine the largest block of houses (166*n* to 166*pp*)—a block which has acquired a sad celebrity, inasmuch as thirty-two cases of cholera have occurred among 106 inhabitants—that is thirty per cent. Of these thirty-two cases, twenty-three proved fatal; *twelve times more* cholera having occurred in this locality than had, on an average, at the time (in the beginning of July) visited the whole city. (In the beginning of July cholera had attacked 2·5 per cent., at the close of the epidemic four per cent. of the population.)

"It seems important to examine this block of houses accurately. We here find twenty-one houses, all of one story; twenty of them harbour each only one family. The houses appear to be well built, and are comparatively well kept. Each dwelling consists of two apartments and a garret. Front and rear we find in each house a door and a window; there is consequently abundance of light and air. Behind these twenty-one dwellings is a common yard, in which, along the houses, is a lane or trottoir, to which I shall revert; along it is a row of linden-trees; the further part of the place serves as a bleach-green. The inhabitants belong (or rather for a considerable number of them belonged) by no means to the pauper class.

"The great mortality here attracts our attention still more, when we come out of the immediately adjoining Stevens' foundation. The Stevens' foundation is separated from the Hospital Lane only by a wall. In it 260 persons dwell in 50 houses, here only one fatal case occurred, and that in the person of a woman, who had been, just before, day and night in the family of her son, where three persons were lying at the same time in cholera. In other parts, too, of the neighbourhood of the Hospital Lane, comparatively little cholera was seen at that time."

Behind these dwellings we find seven privies, they are in comparatively good order; they discharge into a channel which runs along the wall behind the bleach-green, to the moat. Into this same channel the privies of the Stevens' foundation empty themselves. We find here two pumps, yielding clear and well tasted water; to these pumps we shall revert.

Of the 380 inhabitants of the Hospital Lane 170 were of the male, and 210 of the female sex; 28 men and 35 women were attacked by cholera; that is of the men 16 per cent. and of the women 16·5 per cent. This is indeed a remarkable equality for the two sexes. The inhabitants are all industrious working people, earning 10s. to 16s. a week.

"In former epidemics there were attacked in this district, in 1832, 2 cases, in two dwellings; in 1849, 22 cases, in 9 dwellings; in 1859, 2 cases, probably in 1 dwelling; in 1848, no case occurred, nor in 1853, 1854, and 1855. In 1866 the total number of cases was 63 or 16·6 per cent. of the population, while the deaths were 39 or 10 per cent.

The question, observes the author, rises to every one's lips:—"Whence in this case the local violence of the epidemic, so extremely limited in time and space, running its course in twenty-five days, confining itself in its immediate vicinity to one street?"

To answer this query would be, he further remarks, to answer the general question: "What is cholera, and whence comes it?" It is certain that in the Hospital Lane no special causes are discoverable, and the phenomena observed in connexion with the first appearance of the disease are precisely the same as have been witnessed in a great number of other points of the city.

On this subject the author endeavoured to throw light by experiments upon animals. In contrast to former statements, he did not succeed in conveying the disease to them. He tried dogs, an ape, a pig, rabbits, hens, frogs, and fishes.

The principal questions connected with the spread of cholera are:—

Is the infecting matter transmitted through the air?
Is the earth the conductor of the contagion?
Can direct transference from the sick to the sound exist?

"The cholera proceeds from one sick individual and infects others." As to the truth of this proposition all are agreed. It has been satisfactorily demonstrated that the disease arises epidemically in no place where it cannot be conveyed by the sick, or by what was in contact with the sick. But how further? "Through the air?" Many think so. On this point the author proceeds to quote the International Sanitary Conference at Constantinople, and also the views of Pettenkofer. In his own opinion *it is exclusively the digestive organs by which the infecting matter enters the body.* In support of this view he examines in detail the pumps and privies in Hospital Lane, and concludes his paper in the following words:—

"We have in vain sought for any fact plainly at variance with the proposition that the cholera miasm must be received exclusively in the digestive organs. We are convinced that the hypothesis of the transmission of the contagion, not through the air, and not through mere contact, removes the difficulties always correctly adduced against the former idea of the contagiousness of cholera.

"It is true that the final cessation of the epidemic is difficult to explain: why does it not always continue? This difficulty, however, cholera presents in common with all epidemic diseases, as well as with the diseases of plants and animals.

"Every investigation as to the influence of atmospherical causes upon the advent and departure of the epidemic has hitherto afforded only negative results. Only it would appear that much rain favours the decrease of the disease. It is certain that the rain washes away and washes out much. In the night between the 29th and 30th of June, in the course of about eight hours sixty-five million gal-

lons fell on the surface of Utrecht ; as much as if each of the inhabitants had on that night employed fifteen or sixteen gallons in washing the ground.

"It is more than probable that in cholera, as in all other diseases, the individual influence of receptivity exists : the same injurious agency, which produces cholera in one, will probably in another develop only choleraic diarrhœa.

"We may reasonably hope, that individual receptivity will diminish, if we proceed energetically in the beaten way : '*providing for good drinking water, for the improvement of the food of the people, for the promotion of cleanliness, and for the removal of injurious filth, for the improvement of dwellings,*' and not less '*for the investigation of endemic diseases.*'"

Dr. Darby said he had not originally the slightest intention of making any report of what had occurred in the hospital under his care until he heard the reports which were read on the last evening, and those reports being so very different in their results, he thought it right to take an opportunity of mentioning the facts which had come under his own observation, and which he had publicly recorded. He had, between the 28th of September and the 28th of December last, 61 cases of what he had entered in his registry as cases of cholera, and out of which he had only 17 deaths. Now, when he heard the reports read the other night, he thought he must have made a great error in entering those cases, or many of them, as true cases of cholera ; but he came, on considering the matter, to the conclusion, that the gentlemen who had made some of the reports from the large Dublin hospitals were at issue with him as to what cholera was. One gentleman stated that he did not regard as cholera any case that had only purging, vomiting, and cramps. Now, he had recorded cases as cholera that had only purging, vomiting and cramps, with peculiar expression of countenance. If such cases were not to be regarded as instances of true cholera, then he was altogether at issue with some of his medical brethren, and he thought the statistics of the disease obtained from the country dispensaries generally would be very fallacious. He did not think that a case of purging, vomiting, and cramps during an epidemic of cholera could be considered as any other disease but cholera. He was actively engaged in 1832 as a pupil attending cholera cases that occurred in Dublin ; and ever since that he had been engaged in the treatment of cholera cases on every occasion when the disease appeared in this country; and he would say this, that he had never seen what was called English cholera—that disease met with in the latter end of summer or autumn, and which they were in the habit of attributing to the eating of fruits or fresh vegetables—he had never seen that disease as an epidemic in his life. He thought when an epidemic of cholera was present, and a patient was attacked with purging and vomiting they had no option, but must call the case one of cholera. Take any other disease that was an epidemic, scarlatina or typhus for example, and if they excluded all malignant cases, and took nothing but the mildest types of it, they would see what an alteration would be made in the average of mortality. He saw no difference between English cholera and Asiatic cholera, but that one appeared sporadically, and the other as an epidemic. He did not know what people meant when they spoke of choleraic diarrhœa. He had seen diarrhœa when cholera was present, but that it was different from diarrhœa, properly so called, when cholera was not present he could not perceive. Again, if it were said that cholera depended on a certain poison, and if it were said that when a person was attacked by diarrhœa that would, if unchecked, run into cholera, which was the generally received notion, what followed? Was it not clear, if diarrhœa runs into cholera, and if cholera depends on a poison, that the man who had the diarrhœa must have been poisoned in the first instance? Was it not a poison, if there be a poison, that gave the diarrhœa? He had dwelt on this point to justify his own report. He should not wish that any one would suppose for a moment that he would exaggerate the results of his treatment, or call a case one of cholera which he did not believe to be cholera; and if he did not give an explanation of this kind, it might appear either that he was presumptuous enough to suppose that he could cure patients in a greater proportion than the greatest physicians in the land, or that he was altogether ignorant of what cholera was. He had divided the total of 61 cases received into the Rathdown Hospital, from the 28th of September to the 28th of December inclusive, into three classes—viz : Males above 10—Females above 10, and children of and under ten years of age. In the month of September there were two males and two children, and one male died. In October five males, thirteen females, and nine children—a total of twenty-seven. There were two deaths of males, two of females, and three children, making a total of seven deaths. In November six males, nine females, seven children—total twenty-two—the deaths were one male, two females, and two children—total five. In December two males, three females, and three children—total eight. The deaths were two males, one female and one child—total four. He had further divided the patients into mild and severe cases, meaning those that did not go into collapse, and those who did. Thus seven males, nine females, and several children, making a total of twenty-three cases, were admitted to hospital in a state of collapse. Of the thirty-eight who were at the time of their admission not in that stage, seven went into collapse and thirty-one pursued a mild course. The youngest child who died was only four months, the oldest man was seventy years.

Dr. MacSwiney said—The five Dublin reports, of which the "abstracts" were now before the Association, and which they might expect to see in a short time published in a full and complete form—must be regarded as important documents, embodying the experience of skilful physicians, and containing a very large and varied amount of information respecting the recent outbreak of epidemic cholera. And, if the value of the facts contained in these reports were not as great as it might reasonably be expected to be—and he thought that this was the case—he ventured to say that the explanation would be found in the circumstance that one condition, essential to the full success of such reports, was not adopted at the outset. He alluded to a fixed uniform basis of tabulation, under the several "heads" of which could have been clearly catalogued the different items in each report. Had this been done, they would now have had before them a means of observing, at a glance, the several facts stated and conclusions arrived at, each under its proper designation ; and he believed that, in that way, great additional worth would attach to the reports. As it was, he feared it would be difficult to extract, and present, in a condensed form, the full value of all the information contained in these documents. The principal points respecting *Asiatic cholera* requiring to be elucidated may be stated to be—

Its nature, (including the question of contagion).
Its best treatment.
Its best preventives.
Its present death-rate.

He had analysed the "abstracts" with a view to discover what help towards advancing our knowledge upon these points might be derived from a study of them. The following short table would show, in his opinion, that an error, fatal to the full usefulness of these reports, was made in not originally basing them upon a common foundation, where an uniform shape and nomenclature would be used :—

Hospitals.	Admitted.	True Cholera.	Premonitory.	Diarrhœa.	Purging.	Vomiting.	Vomiting and Cramps.	Collapse.	Consecutive Fever.	Death rate per cent.
Mater Misericor.....	197	—	—	54	—	—	—	124	—	53·8
Meath.....	130	—	8	—	—	—	—	117	5	51·5
Dun's.....	180	—	—	—	142	130	84	74	—	47.2
Hardwicke.....	277	193	—	68	—	—	16	—	—	66·3
Mountjoy.....	9	—	—	4	—	2	—	1	—	44·4
Total ...	793	193	8	126	142	132	100	316	5	

This Table might be greatly extended in the same direction. It was not necessary to indicate, in detail, what it shows; he would merely remark that the terms placed over the several columns *were those employed in the Reports;* an inspection of it would at once point out the nature and grounds of his objection. An adherence to a common plan would also, probably, either prevent the following discrepancy between the statements in two of the reports, or else explain the cause of such a singular difference in the experience of the two hospitals.

"The earliest cases of cholera were by far *the most fatal.*" —*Dun's.*

"The earlier cases were more amenable to treatment; while, as the epidemic advanced, the disease assumed a more malignant type."—*Meath.*

As to the treatment, he did not think any certain, or exact conclusion could be arrived at from a study of the allusions to the very numerous remedies contained in the "Abstracts." Perhaps the reports, when published in full, might contain some more precise information on this point than was indicated in the "Abstracts." He assured them that he made those remarks in the interest of science alone, and that he was fully sensible of the great amount of important facts and observations detailed in these valuable reports.

Dr. Lyons said they all knew that in cholera epidemics there was a vast difference in the mortality in different portions of the country. He could not agree with the last speaker that it would have been of advantage to tabulate the cases from a common point of view. He thought by the method adopted they had derived much more satisfactory information than if they had obtained it in accordance with one uniform plan. Presently he would have to suggest a mode by which the data collected might be reduced to a uniform standard. He thought it might be useful to state what the exact data of mortality was as recorded in other epidemics. During the epidemic of 1848-9 in England, the cholera destroyed 85 in 10,000 inhabitants in low sea-side districts; in inland towns it was fatal to 38 in 10,000 inhabitants; in London to 62 in 10,000, and in country localities near small streams to 12 in 10,000 inhabitants. The general average of deaths for England was 30 in 10,000 inhabitants, the total deaths for all England in 1849 being 53,292. Now calculating on such data, the late Dublin epidemic was fatal in the proportion of 40 in 10,000 inhabitants. Some other data of interest might be derived from the facts before them as compared with the facts of other epidemics. In England in 1849 the co-efficient of invasion of the disease or its power of extension will be found to have been for all attacked 0·95 per cent. of the whole population. In the remarkable epidemic at Utrecht brought before them that evening, the per centage was 9, a most extraordinary amount. In Dublin, in 1866, the co-efficient of invasion was about 0·90: in the Hardwicke Hospital in that year it was 1·43, but if the whole population of the three hospitals of the House of Industry were taken the co-efficient of invasion amounted to 0·45 per cent., showing a very important bearing on the question of contagion or non-contagion; because it showed that in a population peculiarly exposed to influences that might be supposed favourable to the propagation of cholera by invasion, the tendency to spread to individuals was 0·45 per cent., which was less than half the co-efficient of invasion in England in 1849, and considerably less than that which the disease exhibited for the total population of Dublin which reached 0·90. There was admitted to the Richmond Hospital a patient with fracture of the humerus who developed cholera, was moved to the Hardwicke Hospital and died, but the disease did not spread within the walls of the Richmond; there was constant intercommunication between the attendants of all three hospitals. It would be seen that while generally the mortality and co-efficient of invasion were high in the city during the epidemic, the co-efficient of invasion was certainly low in the hospitals taken altogether. It might be asked, were we at the beginning or at the end of a great cholera wave? In his opinion, we were at the beginning, or rather in the interspace between two great waves. What was the practical lesson they should derive from this? He should say, in broad terms, sanitary agitation or agitation for sanitary reform in the city. Much had been done in this way, but a vast deal more remained to be done. What lesson was to be derived from the result of the admission of cholera cases into the general Hospitals? He believed the results showed that it was useful, and at the same time safe for persons suffering from cholera to be received into the general Hospitals, and that it was greatly to be desired that facilities for their reception into all general Hospitals should be increased, and further more that local Hospitals for the treatment of the disease should be established, as far as possible, with a view of having patients received at once and treated immediately. Dublin was a natural home for cholera, and much remained to be done to render the city less liable to the invasion of the disease. Our river required to be cleansed, our sewers to be attended to, our streets to be purified, and better provision made for the disposal of our household and domestic sewage. He thought there was a great deal of valuable instruction to be derived from the Hospital reports which had been read. They showed in a logical manner against the conclusion that the disease was capable of being spread by contagion, and furthermore that contagion must be necessarily excluded if we take into account the argument, which the time at his disposal would not enable him to develop, to be drawn from the co-efficient of invasion of the disease as exemplified amongst our own population, or the special and limited population of the Hospitals, and as compared with the spread of the disease in other circumstances and in other towns. With regard to the question of contagion, they must argue logically from contagion to quarantine. Now it had been fully established that quarantine was totally incapable of excluding the disease; it would over-leap all the bounds which quarantine in its most stringent form had been able to establish in the shape of a cordon. Quarantine meant exclusion, stoppage of commerce, passenger and other traffic, and would be quite impracticable in these countries. Fancy a gentleman coming over here in the Holyhead steamer, and finding the police standing on the quays to prevent his free debarcation, which they knew to be so common a means of attempting to check the introduction or propagation of the disease in cities and districts where ultimately epidemic disease of every kind had been known to spread.

Dr. Hayden begged to remind his friend Dr. Lyons of two notable instances of protection afforded by quarantine against the invasion of cholera. During the late epidemic of cholera in the Mauritius, as reported in an admirable memoir, recently laid before the Cork Medical Society, by Dr. Hardie, Surgeon 73rd Regiment, whilst that island was being decimated by the disease, not a single case occured in the adjacent island of Réunion, which was in the possession of the French, and *protected by quarantine.* Again, whilst the cholera epidemic of 1866, travelled along the European coast of the Mediterranean, it respected Sicily and Greece, both of which were *protected by quarantine.* As regarded the general question under debate, it seemed to him that one of the most remarkable properties exhibited by cholera, in common with all other epidemic diseases, was that of occasionally transgressing the limits that ordinarily confine its operations, and devastating regions far beyond the limits of its endemic habitat. To what is this due? Is it the result of a concentration of the specific poison in the atmosphere, to saturation point, and its consequent diffusion by the convenient channels of outlet afforded by commerce and human intercourse? or is it that the atmosphere of certain portions of the earth's surface, commonly unfavourable to cholera, undergoes, at certain times, and under the influence of some unknown cause, changes favourable to its reception and development, and requiring only the introduction of the specific morbid poison to develop the disease in all its potency? Whatever the opinion upon this subject may be, it is all but certain that cholera is conveyed between distant places *only* by man and his articles of dress, furniture, traffic, &c.; and, sir (continued

Dr. Hayden), I deem it no less certain that it is contagious, or communicable from the infected directly to the uninfected. The *media* through which, contamination is effected in the majority of instances, I believe to be the air breathed, and the water drunk, and containing in either case, in suspension or solution, the specific poison of cholera, which thus finds entrance into the circulation by the lungs or alimentary canal. In regard to water, I believe the communication of cholera through this medium is not so well established as it is in regard to atmospheric air. Indeed, I rather incline to the opinion that in most instances of alleged commuication of the disease by the water drunk, the latter, being simply of an unwholesome character, has acted rather as a predisposing than as an exciting cause of the attack. As the question of contagion is that upon which the most marked difference of opinion exists in relation to cholera, I will, sir, with your permission, devote the few moments that remain to me, to the discussion of this portion of the subject, reserving for another place the consideration of it in its several departments. It is noteworthy, as bearing upon the subject of contagion, that cholera has never yet been proved to travel faster than man; whereas, in innumerable instances, it has been demonstratively shown to vary with the rate of man's progress. As facts are more convincing than mere assertion, I will the take liberty of submitting to the society the two following examples of communication of cholera by contagion. One of these came under my own cognizance; and for the particulars of the other I am indebted to a medical friend in this city, who vouches for their accuracy:—

Mrs. G., a woman of middle age, and in the enjoyment of comparatively good health, came up to Dublin from a remote part of the county Meath, on the 5th of November last, for the purpose of having her infant, ten months old, operated on for club-foot. She was admitted into the Mater Misericordiæ Hospital on the following day (6th) and placed, with her child, in the female surgical ward. On the morning of the 13th November she was seized with cholera, and at once transfered to the female cholera ward up-stairs, having continued to suckle her infant up to the moment of her removal. She died of cholera on the evening of that day, the infant continuing unaffected then and subsequently. No little uneasiness was felt lest this woman had contracted cholera whilst in the hospital, and the disease was about to spread amongst the patients generally. The most searching inquiry was accordingly instituted, with the view of ascertaining whether she had been at any time in the neighbourhood of the cholera-wards; in contact with the cholera-patients; or in any way, directly or indirectly, exposed to contagion whilst in the hospital. The result was the conviction that no such exposure had taken place; the woman had not once gone beyond the corridor adjoining the female surgical ward, which is on the second floor—the wards appropriated to cases of cholera being on the third floor, and quite remote from the former. Both wards had separate attendants and implements, and the most scrupulous care was taken to guard against the communication of cholera by those on duty in the infected wards. It is to be remarked, also, that the woman G. was the only inmate of the ward which she occupied who was not suffering from disease or accident of some kind, and that the surgeon in charge of her child had no contact with, or relation to, the cholera cases. On the 16th November the husband of this poor woman came to Dublin, and in a conversation with one of the sisters of the hospital stated, that on the night of his wife's arrival in Dublin, she slept in a lodging-house where cholera had recently been, and expressed the opinion that she there took the disease. On inquiry, it was ascertained that the house in which the woman had slept was 20, Greek-street, and that in that house there had been a case of choleraic diarrhœa late in September, and in the adjoining house, No. 21, no less than five cases of cholera in September and October, whilst that street (Greek-street) yielded, probably, a greater number of cases of cholera than any other street on the north side of the city. It would, therefore, appear that this woman received the cholera-poison in that lodging-house on the night of the 5th November, and developed it in the hospital during the week between the 5th and 13th November. It is impossible to arrive at any other conclusion than this, and I would respectfully ask the gentlemen who advocate the view that cholera is not contagious, to say, whether, if evidence equally strong had been furnished in regard to the communication of typhus fever, scarlatina, or any other admittedly contagious disease, they would hesitate to declare that the disease in question had been then and there contracted by contagion? A medical friend, in large practice in Dublin, has furnished me with the following particulars:—An old lady and gentleman, friends of his, came up to Dublin in August, 1849, from a remote part of the country, where cholera had not appeared, in order to spend some weeks at the sea-side; they took apartments at Blackrock, and on the morning after their arrival my informant was hastily summoned to attend the lady, who was reported seriously ill; he hired a car at the railway-station to drive him to his friends' lodgings, on approaching which the driver significantly remarked that a person who had died of cholera had been removed for interment from that house on the morning of the previous day. The lady, who occupied the same apartments as the person who had died of cholera the day before, there being no others to let in the house, had a severe attack of cholera, from which she was convalescent, when her husband communicated to her the startling intelligence that he too was attacked by cholera, in consequence of which she had an apopletic seizure which carried her off. The husband ultimately recovered, after passing through the stages of genuine cholera, but a servant of the house, who was subsequently attacked, died of that disease. I might multiply examples of this kind, did the time allowed for addressing the Society admit of my doing so.

Dr. Moore, F.K.&Q.C.P., said that during last autumn he was engaged with Dr. Kennedy in treating cases of cholera in Sir Patrick Dun's Hospital, and his idea was to check the diarrhœa as the best way of dealing with the disease in the first instance. If all cases of vomiting and purging, without cramps, were excluded, the per centage of mortality would have been much greater. He found the mortality in the Hardwicke Hospital was 66 per cent., in Dun's Hospital 47 per cent., and in the cases which occurred under Dr. McDonnell, the mortality was under 50 per cent. He asked how was this to be accounted for; and he found on inquiry, that it occurred exactly in the way he had expected. The provision made for the epidemic of cholera, under the Poor-law administration, completely fell through. On the south side of the city 28 beds were opened for cholera patients. A rush of cholera came on. Eight beds additional were opened in Dun's Hospital; but there was a limit to this, and the result was that the accommodation provided was insufficient. Cases were brought to the Meath Hospital, but could not be received; they were then taken to Dun's Hospital, but when that, too, was full, they were sent on to the Hardwicke Hospital, where they arrived in a moribund condition. If ever we were afflicted with another visitation of cholera, he believed that if a house to house visitation were adopted, all the general hospitals opened, and temporary hospitals established in different parts of the city, the most satisfactory results would follow. He thought what he had stated was a strong argument for the adoption by the authorities of more active and decided efforts, in a sanitary point of view, to check the epidemic.

Dr. Henry Kennedy began by saying he was a non-contagionist; and he said so, though aware of the many arguments, some of them very forcible, which had been advanced on the other side of the question, and, more particularly, he must advert to the very elaborate paper, or rather essay, by the late Dr. Graves, which had appeared first in the Dublin Journal, and, subsequently, in another form, had been transferred to the volume of "Physiological Essays," written by Dr. Graves, and edited by Dr. Stokes. Dr. Kennedy thought that, in the consideration of this question, several points had been overlooked. He then

went on to say: "Several years back, whilst investigating the subject of epidemics, I was struck by the fact that all those which had traversed a large portion of the globe travelled in the one direction, that is from east to west, or from south-east to north-west. This appeared to me of such importance that I had a chart printed of these epidemics from the earliest periods, and brought it before the Royal Irish Academy. It shows that ages ago, when human intercourse must have been vastly less than at the present day, epidemics travelled as they had done of late, and of which the cholera in each of its invasions afforded a very good example. It also proved that the epidemics affecting cattle travelled in the same way, and the cattle-plague of last year was an example of this kind, having come to Great Britain from Russia. As an evidence of what may be deduced from the chart, I may mention that in the great epidemic fever of 1847-48, it was the fashion to speak of Ireland as being the originator of the disease. Now this was a mistake. Fever had existed in England far above the averages, and for months before it reached this country. Nor was this the first occasion on which a similar event had occured. But further, and still speaking of the question of contagion, I would observe many seem to think that because an epidemic occurs, it must therefore be contagious. Two, three, or more cases have arisen in one house, within a brief period of each other, or it may be one room, and the conclusion is hastily jumped at that the spread of the disease, whatever it be, must be due to contagion. Now, on this point I would ask—Is not the occurrence of cases in such rapid succession opposed to any real knowledge we possess of the laws of contagion? Have we any reason to suppose that a few hours are sufficient, not only to generate, but to bring into active life, such a disease as cholera? Are not the cases too frequently simultaneous? and will they not thus prove more than even contagionists demand? In support of these views I would further mention a fact with which all who have had charge of a large hospital must be quite familiar. I mean the sudden appearance of a disease in a single night. Thus, three or four cases of erysipelas will occur within a certain twelve hours, or an invasion of laryngitis, or otitis, or pneumonia, or a number of the patients will all be found worse on the same morning, when there was every reason to have expected the contrary from their state the previous day. All these considerations and facts—and they could have been easily added to—have ever led me, when speaking of the contagion of cholera, to look upon what I would call negative evidence as by far the most important which could be adduced on the question. Now, of this kind of evidence there are, I believe, more numerous facts than have ever been brought forward about any other disease, in which the question of contagion arose. By far the greater numbers of those who have seen the disease in India are non-contagionists, and the scale on which they have seen the disease entitles their opinions to the greatest weight. Again, the late Dr. G. Kennedy told me he had been sent down to Galway in 1832, and that if ever an opportunity offered when contagion might have been expected to have played a prominent part, it was then; that the town was very severely visited; and the people taken quite unprepared; that houses, nurses, and every requisite had to be got at a moment's notice; and yet with all this the nurses escaped. Dr. Byrne, of the Lock Hospital, who was also sent down then, can confirm this statement. The result, too, of the last epidemic in Dublin also bears out these facts, for the attendants at the several hospitals may be said literally to have all escaped. Neither can I omit noticing the fact that cholera, of all diseases, brings the nurse and the patient into the closest contact. If cholera be contagious, it is little short of marvellous to explain how so many escaped. When epidemic fever visited us in 1847-48, every new nurse at the Cork-street Hospital, where some six hundred beds vere open, took fever within a month of their appointment. Before sitting down, sir, I wish to say one word in reference to the treatment. I believe a mustard emetic to be often a very valuable resource; and I think I have had enough of experience to enable me to speak with some confidence on the point. Want of time, however, prevents me giving my reasons for this mode of treatment, which, of course, is not new. In conclusion, I wish to speak of two points bearing on the prognosis. Every one who came in contact with cholera must have met cases where the question of life or death became a very difficult one. They were usually pulseless cases, as far as the wrist was concerned, and they would live in this state for many hours, or even days. In such I observed that, if they were going to die, puerile respiration declared itself, and seemed then to be a sure precursor of death; and, again, I found that one of the sounds of the heart would, under similar circumstances, be lost. Contrary, however, to your observations, sir, on the heart in fever, it was the second sound that was lost, as, indeed, the most plausible explanation of the fact would lead us to expect; for, I believe, both the state of breathing I have spoken of, and the loss of the second sound were directly due to the state of the blood in these patients. It had ceased to circulate, or nearly so; and, as long since shewn by by Sir D. Corrigan and others, the valvular sound of the organ, that is, the second, must necessarily then be lost."

Dr. Davys said he had come there to hear if there had been any new and efficient method discovered of treating cholera. He had heard a great deal of statistical facts, which he might have obtained from the returns of the Registrar-General, and he had heard some discussion as to whether cholera was contagious or non-contagious, but except what fell from Dr. Moore, he had heard nothing as to the treatment of cholera. No more dreadful scourge had ever visited this country. In his own district, from the 7th to the 29th of September, there had been at least thirty cases. He had seen it attack persons in a good condition of life, and persons in humble circumstances, and if more than ten minutes were allowed him he could prove that cholera was contagious. But what he wanted to know was, whether there was anything new in the treatment of cholera. He himself had tried with cholera patients everything he had heard of, and in no three cases had the same method of treatment succeeded. He had tried castor oil and found it good on some occasions, while it failed on others. The ordinary mustard emetic had succeeded with some, and failed with others. He therefore hoped to hear something of importance as regards the successful treatment of the disease, which he regretted to learn was, in the opinion of Dr. Lyons, likely to revisit this country.

Dr. Laing, Staff Surgeon-Major, said he was stationed in Kurrachee in Scinde, in the month of June, 1848, where all communication was cut off by sea from all parts of the Continent, and little communication by land existed. Cholera came on on the 14th of June, and in the first twenty-four hours 100 men came into Hospital. It appeared as if a cloud came across the sun, and at six o'clock that evening the men began to come into Hospital, and before seven o'clock there were thirty men lying dead. The disease went on for ten days, and in that time they lost 240 men. He ought to have said that no rain falls in that country; the dew point was very high, there was very little difference in the wet and dry bulb, and there was a constant breeze blowing from sea which kept the air moist. The regiment he belonged to had had a great deal of hard work, and had returned to this place, and were in tents when the epidemic broke out. The other regiments suffered not so much, but they lost a good deal of men also. The men suffered dreadfully, but of the officers in the cantonment only one was attacked, and he recovered. Another officer on the station was attacked and died. The atmosphere was most oppressive. It was a remarkable fact that the brahimine, kites, and crows, which collected about the cantonments to pick up the offal, disappeared altogether, and did not return until all the cases of cholera had ceased. The domestic fowls about the cantonment died, and he was told that the sheep in the neighbourhood suffered severely. The disease left them and went up the river Indus, and gradually appeared to lose itself in the upper country. The dakrunners were stricken down on the road, and found lying there dead. Every mode

of treatment was tried. In the first thousand cases of disease there were seventy or seventy-five deaths, and as the disease proceeded towards its termination the mortality diminished. He had since observed the disease in Bengal, and it broke out there under different circumstances. It appeared about three weeks after the monsoon. The rainfall at the beginning of the monsoon clears the atmosphere, and a fortnight or three weeks after the rain ceases to fall, the air becomes close and oppressive, and it was then they looked out for the appearance of the disease. The moment a case of cholera or diarrhœa appeared, the regiment was moved across the Jumna river, and not a single case of cholera occurred in the six companies, which were thus moved. Diarrhœa, he was perfectly certain, ought to be counted as a concomitant of cholera. He thought every case of diarrhœa, during the prevalence of a cholera epidemic, ought to be regarded as a case of cholera. He thought the principle acted on in removing a regiment from the place in which it was attacked with the disease might be taken advantage of in Dublin. If an outbreak took place at Donnybrook for instance, if the whole population were moved out of the place, it would save many valuable lives. He approved of the primary treatment of diarrhœa by opium and astringents. When purging came on with suppression of urine and rice-water evacuations, he had found dashing with ice-water to have had more effect than anything he had seen used in the disease. (Applause.)

Dr. Quinlan said he believed that a great many officers who had served in India, and had experience of cholera on an extensive scale, were of opinion that it was not contagious. Now, as there were several army medical officers of Indian experience present, it would be desirable if they would favour the meeting with their views upon that subject.

Dr. Haverty, 52nd Regt., observed that from what he had seen of cholera in India, he was strongly impressed with the belief in its non-contagious nature. He had nothing to bring forward in the way of statistics, but he had directed his particular attention to that point, and such was the conclusion at which he had arrived. In the treatment of cholera cases he always had the aid of the men of the different companies which were attacked with cholera to wait on the patients, and he could not adduce a single instance of a man having taken cholera who had attended on a cholera patient as a nurse. It had been observed a few minutes ago that the nursing in cholera was different from that in any other disease. The men were constantly and closely employed, they were brought into immediate contact with the patients, and if cholera were contagious, one would suppose these were the very circumstances under which the contagion would spread. Yet, so far as his experience was concerned the contrary had been the case. He had seen instances of the extremely eccentric way in which cholera travels. On one occasion cholera existed in a place within sixty miles of where his regiment was stationed, and swept the country in the immediate neighbourhood, and carried off a great number of people, yet it did not touch the cantonment in which he was, although there was a high road between the two places, and constant communication kept up. In the next year cholera attacked the cantonment where he was, and left the city at the distance of sixty miles, and although people were constantly passing from one place to the other, no case of cholera appeared in the latter. Atmospheric influence was much talked of as a means of conveying the cholera in India. In the instance to which he referred the wind was in a direction favourable to the spread of the cholera from place to place, yet the disease passed by some places, and made a jump as it were of sixty miles to another locality. As regarded this cantonment of which he spoke, about ten days after the outbreak took place the troops were moved to a distance of about six miles from their former position, and there also the cantonment was on the high road, about eight miles from a city, where the wretched natives were dying by hundreds, and it was said, by thousands. The cholera ceased in two or three days after they removed to that locality. Some few cases occurred within twenty-four hours after their removal, but it was probable the men had brought the germs of the disease with them. The disease, however, ceased to spread, and all the time the wind was blowing towards them from the city where the cholera was raging, and there was a constant intercourse kept up with the natives. As regards the treatment of the disease, he was always in the habit of saying that nursing was the only thing for it. He still knew of nothing so effectual as constant attention, the introduction continually and cautiously of nutriment and stimulants, and friction with counter-irritation. It struck him as extraordinary, if the preliminary stage of cholera were ushered in by diarrhœa, why there should be strong advocates for the use of purgatives. He should have thought that their great object would have been to check anything in that direction. Their great object was to get hold of cholera in its early stage, and put a stop to it, and they were successful in doing this. How purgatives could be advocated under these circumstances he was at a loss to understand. Mustard emetics were spoken of as being very useful, but when their object was to check purging and vomiting, he did not see why they should try to induce vomiting by giving a mustard emetic, or any other emetic. (Applause.)

On the motion of Sir Dominic Corrigan, seconded by Dr. Lyons, the debate was adjourned until the following evening.

THE CASE OF WIGHT *v.* FIELD.

At the meeting held in support of Mr. Field, on the 2nd instant, and to which we called attention in our leader of the 3rd, the following were the resolutions adopted. As already announced, Dr. Copland, F.R.S., occupied the chair at this meeting, which was one of the most successful ever held for a similar object. About 120 of the leading members of the Profession being present.

First Resolution.—Moved by Mr George Sandeman, seconded by Dr. C. J. B. Williams:—

"That this meeting desires to express its sincere sympathy with Mr. Field, for the great annoyance and anxiety to which he has been subjected by the proceedings taken against him in the recent action of Wight *v.* Field," and while congratulating him on the successful issue of the cause, wishes to convey to him an assurance of the undiminished regard and esteem in which he is held."

Dr. Gibson and Mr. Aikin addressed the meeting in support of this resolution.

Second Resolution.—Moved by Mr. Prendergast, seconded by Dr. Wight:—

"That in order to demonstrate the feeling which this meeting entertains towards Mr. Field, a fund be raised with a view of reimbursing him for the heavy legal expenses which he has been compelled to incur"

Mr. Hill addressed the meeting.

Third Resolution.—Moved by Dr. Markham, seconded by Mr. Page:—

"That a committee be appointed to carry into effect the object of the second resolution, and that Dr. Langmore and Mr. Curgenven be requested to act as treasurer and honorary secretaries."

Dr. Langmore and Curgenven addressed the meeting.

Fourth Resolution.—Moved by Sir W. Ferguson, seconded by Mr. Propert:—

"That the thanks of the meeting be given to Dr. Copland for his kindness in occupying the chair on this occasion."

Dr. Copland returned thanks.

CURRENT LITERATURE.

A small pamphlet by Dr. W. M. Dobie "On the Use of Chlorine in Asiatic Cholera," has previously appeared in the *Endinburgh Monthly*. It gives an account of fifty-two

cases that occurred at Chester in the last epidemic. Out of thirty-four treated on the ordinary plans, only eight recovered, while of eighteen cases treated by chlorine, there were ten recoveries. Dr. Dobie considers that chlorine has a decided effect in restraining exudation from the mucous membrane of the bowels, that it increases the pulse, and restores the circulation. The preparation of the mixture is a point of importance in the author's opinion. If chlorate of potash be dissolved in a quantity of water, and hydrochloric acid then added, very little chlorine will be set free, and the mixture is then said to be less efficacious. Should this be found to be the case it would certainly be an argument against the benefit derived, being all attributed to the mineral acid.

The author says :—

"If prepared in the following way, the result is very satisfactory :—

"Take a clear dry wine or brandy bottle, place it for a few minutes upon a hot brick, or upon a stove, until it becomes thoroughly warm, then take eight grains of chlorate of potash in coarse powder, and add to it one fluid drachm, by measure, of chemically pure hydrochloric acid ; agitate the chlorate in the acid until all effervescence ceases, and the chlorate is completely dissolved. Then add an ounce of water, shaking the bottle briskly. Continue thus to add sixteen ounces of water, ounce by ounce, shaking the bottle between each addition. If two fluid drachms of chloric ether be now added, the mixture is complete.

"The chlorine mixture, as thus prepared, is about one-third saturated with chlorine, it can be readily taken by patients direct from the bottle ; but it was generally administered with an equal bulk of water. Three drachms of the mixture are about equal in strength to a drachm of the liquor chlori of the British Pharmacopœia.

"The dose of the chlorinated mixture was half-an-ounce every hour, or every two hours, to an adult ; if the first dose was vomited, another was given after a shorter interval.

"Mr. Brittain chiefly used the liquor chlori of the British Pharmacopœia in drachm doses, diluted with a tablespoonful of water."

Dr. Dobie gives reasons for proposing to add muriate of morphia in some cases, and adds:—

"I noticed that the chlorine mixture had a remarkably sedative action upon the stomach and bowels ; the vomiting as well as the diarrhœa being restrained. My impression is, that the chlorine mixture, with the addition of chloric ether, was better tolerated by the irritable stomach than the diluted chlorine water given alone.

"The pulse, in cases where it was quite imperceptible at the wrist, became in a short time full and strong. The capillary circulation being restored, the surface became warm, and the purplish blue of the skin changed to a more natural hue. The cramps were subsequently less severe. Reaction was seldom violent, and I do not recollect one instance of secondary fever in the cases treated by chlorine.

"The secretions of the liver and kidneys in mild cases were rapidly restored. Another point to be observed is the remarkable comfort it gave to the patients ; the excessive restlessness was much mitigated, and one man said, 'I could not live without that medicine.'"

We have received the Report of the Savernake Cottage Hospital, where forty cases have already been treated, of which twenty-one were cured and relieved, nine remain in the hospital, and only two were sent out as incurable. We have thus another example of the success of Cottage hospitals. Another report to hand is that of the Devonshire Hospital at Buxton, which seems to continue its career of usefulness. We observe that a single guinea entitles the donor to recommend a patient, but each patient costs £1 17s. 5½d. The charity is also like many others in want of money. Why not make the subscription entitling to recommend two guineas? This would certainly assist.

Mr. Nimmo has added to his handy little manuals one on "Domestic Medicine," written by Dr. Shore, who states in his preface it is intended to show what to do "preparatory to the arrival of the doctor." He adds a protest against too much "*doctoring at home*," which, so far as our experience goes, is not without need. Indeed, we think that the part devoted to the treatment of diseases may be well disregarded wherever medical advice is accessible. The hints on emergencies, like drowning, bleeding, poisoning, management of the sick-room, preservation of health, diet, regimen, &c., are all much more within the province of treatises on domestic medicine, and we are therefore glad to find a large portion of the book devoted to these subjects.

Two new journals have come to hand, and demand a few words. First, the *Journal of Cutaneous Medicine*, edited by Erasmus Wilson, F.R.S., and which is to appear quarterly. The editor has secured the services of Dermatologists in England, Scotland, and Ireland, all three kingdoms being represented in the present number. He presents a very bold front to the opponents of specialism, and defends not only special journals but special hospitals, with a vigour and pungency quite agreeable. We shall not be expected to analyse the twelve original contributions in this brief notice. They are such that if names command success the new Quarterly may be considered as already established. The journal is 8vo, and the printing and getting up altogether unusually excellent. The other candidate for favour is *The Laboratory*, a weekly of the size of *Notes and Queries*, and which will be devoted to chemical and physical science. We are very much pleased with the first number, which contains several good communications. In the editorial department a first-class protest is made against the too common assumption of titular letters calculated to mislead as to their meaning. We are glad to welcome this organ of opinion and record of scientific progress.

CHOLERA REPORTS.

We are requested to state that it was the intention of Dr. Lyons to substitute for the section on treatment in the report of the Hardwicke Hospital, a more matured general statement of the nature and results of the various plans of treatment employed in the last epidemic, but the short period at our disposal for the publication of these abstracts compelled us to print off the abstracts as they stood. In a future number we hope to give a revised summary of the treatment employed.

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"SALUS POPULI SUPREMA LEX."

WEDNESDAY, APRIL 17, 1867.

GREENWICH HOSPITAL.

From what has transpired during the week, it would seem that the Seamen's Hospital Society is in danger of losing the advantages for which the promise of the Prime Minister was deemed a sufficient guarantee. When the managers of the Society—their cause having been advocated by most of the organs of public opinion—were informed that "Her Majesty's Government were perfectly willing to grant the loan of a part of Greenwich Hospital," they naturally concluded that the merchant seamen, who have hitherto depended for Hospital relief on the *Dreadnought*, would henceforth be accommodated in a building particularly well adapted for this purpose. It seems, however, that a *hitch* has occurred, and that, after all, they have been "reckoning on their chickens" too early. The Admiralty, in fact, now offer a portion of the building which is utterly unsuitable for the purpose, and which the Society will, therefore, be driven to decline. That there is no need for such a step as this is abundantly evident from the fact that there now remains almost untenanted a part of the edifice which, at a moderate expense, would be exactly fit for the proposed purpose. Whence, then, this perversity on the part of the Admiralty? It has been boldly asserted that the part most suitable for hospital purposes is refused because it forms the most pleasant apartments for officers. The conveniences of these *officers and gentlemen* is, no doubt, a very important matter to them; but we scarcely imagine that Parliament will consider it so paramount as to sanction the claims of the sick seamen being put on one side. Nor do we believe that the Government will, in the end, be persuaded to prostitute a noble national edifice to the personal comfort of a few men, however great they may consider their claims. There are many ways in which the country may express its gratitude to officers who have rendered essential services, and the English people will not be slow to recognise such claims. It is, therefore, necessary to impress on those concerned that we have only one Greenwich Hospital, and to that the sailors of the mercantile marine have long contributed a proportion of their wages. This matter may, therefore, be looked upon in the light of strict justice. On behalf of the sailors, the Society asks for what is already partly their property, and this claim has been allowed by the House of Commons. Were it a mere matter of generosity, it were well to give handsomely, if at all, but in a case like this a mean subterfuge is simply intolerable. The quarter desired by the *Dreadnought* authorities is exactly suited to their wants in size, as well as other particulars; it is less connected with the other parts of the building; it is farthest from the schools; it possesses a river frontage which would make it accessible from a boat, a very great consideration; it has neither pensioners nor "helpless" wards; it is divided by numerous wooden partitions which could easily be removed, and thus large, airy wards be made at a trifling expense. In all these particulars the part offered by the Admiralty affords a remarkable contrast, and unless the authorities yield to the pressure of public opinion, the Society must decline their proffered accommodation, and proceed, at a vast expense, to erect side by side with the vacant hospital a building very similar. Why should needless waste be incurred? If only to gratify a few retired officers it will be one of the greatest *jobs* ever perpetrated.

What does the Admiralty propose to do with their possession? simply nothing, but expend a few thousands a-year on keeping it in repair. Were they to come forward with a scheme to create a great Naval Medical School like that of the Army Department, and offer to admit into the Hospital the merchant sailor as well as the seamen of Her Majesty's Navy, we could understand their desire to retain control over the building. Even then there would be no great difficulty in reconciling the conflicting claims by granting the Seamen's Hospital Society a wing in which to carry on their operations in conjunction with the staff of the Naval Hospital. Such a scheme, would, we believe meet with the approval of the country, and we throw out the hint for the benefit of all whom it concerns. If thought desirable, it would be by no means difficult to submit the whole Hospital to one Board of management. The medical men who have most distinguished themselves by their connection with the *Dreadnought* could receive appointments of some kind in the National Hospital, and would be found worthy and acceptable colleagues of those Naval Surgeons who would be their colleagues. The other parties interested only desire the welfare of the sick sailor, and would therefore, no doubt, be delighted to co-operate. What, then, is there to hinder the realization of the scheme we have sketched? A magnifi-

cent hospital is already built; there is a princely income already set apart for the seaman. Why should not England possess a Naval Medical School worthy of her position as the greatest sea-faring country in the world? To be sure our proposal would necessitate the inauguration of an era of justice to the Naval Medical Service, and is therefore likely to meet with hostility from some of the Admiralty authorities. But the grievances which have so long banished the best men from the Navy cannot continue much longer. The Admiralty must mete out justice to their Medical Officers. Bit by bit all that has been demanded will be given. Year by year the voice of the Profession will make itself heard in Parliament until the wrongs so long endured have all been redressed, and the Navy presents a sphere of honour which will attract a full supply of candidates anxious to place the highest surgical talent at their country's disposal. Why not at once inaugurate a better system? Why lavish millions on every kind of armament, and yet perpetuate a system which, in the event of a sudden outbreak of war, would leave our wounded sailors unprovided with a sufficient surgical staff to cope with the emergency?

THE OBSTETRICAL SOCIETY AND MR. BAKER BROWN.

After a week's review of the proceedings in this *cause celebre*, we see no reason for changing our first opinion—that the entire affair will long be a subject for regret to all sections of the Profession. It appears to us that even the mode of proceeding was objectionable. The condemnation of Mr. Brown should have been the general and spontaneous emanation of the Society, and the charges should have been referred to a Committee for investigation. It is alleged, indeed, that Mr. Brown did not at the last moment afford the requisite facilities for such a course of action. But it was not for Mr. Brown's satisfaction that a Committee should have been appointed, but for the satisfaction of the Fellows of the Obstetrical Society. The steps actually adopted have been as diverse from this, or any other form of justice, as can well be imagined, and remind one of nothing else so strongly as the tactics of the defunct Jamaica Committee, or any other similar overflow of party political spirit, and we fear will tend to degrade the Obstetrical Society from its scientific position, and reduce it to a mere Club, where Medical coteries strive for mere personal ends.

For ourselves, we shall never cease to regret that the Council adopted such measures as they did. Whether Mr. Brown is unfit for Medical society or merely indiscreet, it is not surprising that he failed to stand against such an overwhelming attack. The Executive of a Society, having full power over the apparatus and machinery, may well overpower the resources of a private member, if he be not exceedingly popular and influential.

We regret, also, that it was necessary to make such an earnest appeal to the Fellows, for surely all those present knew as well as the Council the nature of Medical ethics, and were sufficiently interested in the well-being of their Profession, to vindicate its morality without such extraordinary stimulus.

If the course which we advocated had been adopted, it is by no means certain that the result would have been the same. A vote of the Fellows for the expulsion of a member on a charge of Medical immorality ought to be all but unanimous. Notwithstanding all the pressure, only half the Fellows attended, and of these forty-one voted for Mr. Brown. We can understand such a painful variation of opinion as that manifested by the vote on a difficult scientific subject, but such a variation on fundamental medical morality, especially under the influence of the lecturing and drilling and chastening to which the Fellows were subjected by the Council, is proof of dissensions which may yet prove the ruin of the Society. On the one hand, the Executive, with a machinery always ready to be set in motion, occupy months in private and rigid enquiry into the moral conduct of one of their Fellows, they whip up their rural supporters, they threaten to resign to a man if their point is not carried. Yet after all this violence and frenzy, what have they to show? a majority of thirty-eight above the two-thirds required by the bye-laws, one-half of the Fellows only being present. We can understand the wisdom of acting on a much smaller majority on the primary election of a Fellow, but the expulsion of one on such charges, in such a manner, must, we venture to think, when the bitterness of party spirit has passed away, be looked back upon as an episode calculated to prove most injurious to the prosperity of this Society.

THE REFORM OF THE SANITARY LAWS.

The Memorial presented by the Social Science Association to the Government through the Lord President of the Council, and reprinted in our columns last week, referred to a condition of the law as injuriously anomalous as any the statute-book contains. The earnest representations of the influential deputation which took the matter in hand cannot have failed to impress the Lord President with the fact that the laws as they stand at present are regarded by practical men as all but useless and that their amendment is urgently demanded, and that the matter is of sufficient import to require attention from Government at the earliest period after they are extricated from the Reform block which now stops the legislative traffic.

Nothing can be more eloquent of the muddle which exists in the public and the official mind on matters in connexion with sanitary legislation than some of the facts mentioned by the deputation. It appears that the administration of sanitary matters is at present a divided responsibility with four separate departments—the Privy Council, the Police, the Guardians, and the Registrar-General, and as each act is more or less dependant for its efficient working on the other, each department ought to work in harmony with the other.

It is not difficult to imagine that this condition of official concurrence is not fulfilled, and that the Privy Council know as little of the Guardians as the Police do of the Registrar-General. An amusing instance of this was quoted by one of the speakers. A certain Vestry Board in London initiated sanitary reforms under an Act of Parliament, and in the exercise of their powers they printed and circulated sundry regulations. Having obtained possession of one of these printed forms, and being desirous of following the example, another Vestry adopted the regulations, and sent a copy to the authorities for approval. In answer they received a sharp note informing them that the powers they sought were perfectly illegal, and could not be sanctioned. Manifestly the writer of this letter never heard of the Act of Parliament under which these powers were conveyed, and he was speedily extinguished by a note calling his attention to the existence of such a statute. Medical Officers of Health thus finding their action under one Act barred by another, and the abuses which they desire to remedy perpetuated by the protective influences of inefficacious laws, appeal to the Government for redress, and for a revision of the law which will make it efficient for the purposes for which it was framed. Their complaint that a system of legislation in which each Act is intimately connected with the other, so that proceedings under the powers of one must necessarily trench on the provisions of the other, is under the control of four different and unconnected authorities, is manifestly a common-sense objection. There ought to be one responsible authority, and in that authority ought to be vested all the experience and intelligence in sanitary matters which is now sparingly distributed amongst officials who, perhaps, hardly consider such trifles worthy of their consideration. In the nomination of this central sanitary authority the deputation were not prepared to offer any explicit suggestion. The hint of a cherished hope that a Board of Health might be established, with a responsible representative in Parliament, was allowed to escape, but it was judiciously not pressed, partly, we imagine, lest it might be considered as an implied slight to the very valuable sanitary function of the Privy Council, and its Medical Officer, Mr. Simon, and principally lest so sweeping a reform might embarrass the ready action of Government. We have more than once represented the great public need of some such central sanitary authority, and we venture to press the suggestion upon the Government with more ardour than the deputation assumed. But if there be any existing official source more suitable for the exercise of these functions, it is the Registration Department, which could with facility be expanded to meet the requirements, and already possesses a mechanism proved to be valuable for such purposes.

But the acceptance of this suggestion must fail of itself to remedy the existent evil, because the Acts are in one respect intrinsically inefficient. Most of these measures unfortunately depend for their working on the progressive tendencies of Boards of Guardians and Vestrymen, to whom the power is given of acting or not, just as they think fit. They may appoint Officers of Health and Inspectors of Nuisances, and may provide carriages for the accommodation of patients labouring under infectious diseases, but experience shows that in nine cases out of ten these powers are grossly neglected, or even wilfully obstructed. Knowing the intellectual capacities of Boards of Guardians as we now do, the statistics of their obstructiveness are not surprising. It was stated by one speaker that only eighteen towns out of fifty-nine from which he had obtained returns had availed themselves of the permissory powers to provide carriages for infectious diseases—that the numerical proportion of the Health Officers to the population varied from 1 in 4000 persons up to 1 in 211,000, and their salaries from £12 a-year in Aberdare to £1000 in Liverpool. The fact that, on an average, there is but one Health Officer to every 60,000 inhabitants, and 1 inspector of nuisances to 30,000, is sufficient to discredit the whole system, and ought to convince the Government that the administration of the Sanitary Laws has been placed in wrong hands. We can hardly hope for any prompt action in this matter, but we cannot doubt that the expression of interest volunteered by the Lord President was heart-felt, and that the Social Science Association may hope for a redemption of his promise to them.

THE PRIVILEGE OF MEDICAL CONFIDENCES.

The arrest of Dr. Keogh, the medical officer of the Carrigaholt Dispensary District, for "knowingly comforting and concealing" Thomas Fennell, who stands charged with high treason as a Fenian, raises a medico-ethical question of no little difficulty. It appears that Dr. Keogh was sent for to attend a sick woman, and after his attendance on her was told that he was wanted by a sick boy in the next room. He found this boy suffering from the effects of a gunshot wound, and he did what was necessary for him without informing the authorities of the fact. It does not appear that Dr. Keogh knew anything about the wounded man when he went to attend the sick woman, nor had he any other reason to know that his patient was a Fenian,

except a natural suspicion from the nature of the wound. Assuming his knowledge that the man was a traitor, a very serious question arises as to the course the medical man ought to have pursued. We quote below the address of the defending Council, and the observations of the Magistrate in giving judgment:—

"Mr. O'Loghlen, in a most eloquent and argumentative speech, upheld the question of privilege to which he considered his client, as a medical man, eminently entitled. The learned gentleman adverted to the obligatory oath which was imposed on Dr. Keogh and on every duly qualified member of the medical profession—and which, as a physician and a man of honour, he was bound to observe. Then, it was a fact that Dr. Keogh was a stranger in the locality where he lately went to reside. The learned counsel held that even if he did visit the sick man, it was no part of Dr. Keogh's duty to become a public informer. Had he done so, he would consider that Dr. Keogh would have forfeited the esteem and respect of the high and honourable profession to which he belonged. The learned council observed that the laws of the British constitution were also clear on the subject, which laid down, that every subject of the realm was presumed to be innocent of crime, until proved to be guilty by a jury of their countrymen. The accused Fennell formed no exception. After descanting on the privileges to which Dr. Keogh was entitled, and to the law bearing on the subject, the Counsellor said he highly approved of the honourable and humane course pursued by his client.

"After a judgment from the magistrate acquitting Dr. Keogh, the Chairman said, I do not think I can add anything to the very clear and able analysis of the evidence in this case which my brother magistrate, Mr. M'Cullagh, has just pronounced, and I fully concur in the judgment arrived at, that there is not sufficient evidence to allow the case to go farther. I should have contented myself with this short expression of my opinion, were I not apprehensive that some expressions of my friend, Mr. O'Loghlen, should be taken as laying down the law with respect to the privileges of professional men, in reference to persons involved in the charge of high treason. Although medical men are sworn to keep the secrets of their patients, this is subject to the restriction that in cases of high treason those medical men come within the plain and clear law, that any person, whosoever, who shall knowingly help, comfort, assist, or shelter in any way, a traitor, is himself a traitor. This is, I believe, the universal rule of all nations, and I know it prevails in America, for there the medical man who set the leg of Booth, the assassin of President Lincoln, was tried and hanged as a traitor. There are no accessories in high treason, all are principals, and from the very necessity of the thing, counsel and attorney are protected by the law, and I hope they will always be protected, and not only protected, but if they should betray the secrets of their clients in the most remote degree, they would be held accountable for so infamous an act. But in the case of medical men or of clergymen of any persuasion, there is no protection whatever. Nay, further, in the case of clergymen, so emphatically and clearly is the law in their case laid down, that I find in 28 Henry VIII. c. 7, s. 3, *that there shall be no sanctuary for traitors.* Even the holy precincts of the Church was and is no safeguard for these persons."

It appears to us that in this question of privilege more depends on the circumstances of the case than on the construction of the law. Whatever the law may be, we should all feel ourselves not only morally justified, but prompted by all the dictates of humanity to succour a man whom we might find, without our seeking for the occasion, seriously wounded, and we would consider it a cowardly and dishonourable act to make use of the unwilling confidence of such a patient to hand him over to justice. But we can well understand that, going out of our way to assist traitors, and concealing a knowledge of their guilt, which is not a matter of suspicion, or forced upon us by circumstances, is, and ought to be, an offence against the law. Though we cannot, therefore, condemn the law which makes such a degree of "succouring, comforting, and concealing" a participation in the crime, we believe that the law never contemplated the enforcement of the penalty in cases like that of Dr. Keogh. We believe that this principle of honour would be more or less connected with the nature of the crime, and the same rule of conduct which applies in the case of a political offence, however abhorrent to a proper loyalty of feeling, will morally apply, with less force, to the case of a murderer. If this latitude were not allowed to the profession, the criminal has only to choose between the penalties of the law and the danger from his injury; and we do not think it could have been the intention of English law to drive him to the scaffold by withholding medical relief.

Notes on Current Topics.

The Princess of Wales.—It is universally regretted that the health of her Royal Highness continues to give cause for anxiety. Mr. Hawkins and Mr. Pollock have both seen the royal patient, in consultation with Mr. Prescott Hewitt and Mr. Paget. In deference to the well-known wishes of the illustrious family, we have all along abstained from comments on the case, except such as were really called for by the public interest excited on behalf of the Princess, who has endeared herself to the nation. We shall continue to maintain what we consider a judicious reticence, merely repeating that the information we have given has been absolutely correct, while the attempt of some of our contemporaries to give a different version to the facts, is as erroneous as it is uncalled for.

Health of the French Imperial Family.—The illness under which the Prince Imperial has laboured, has not, we fear, taken a more favourable turn. There prevailed some time since an apprehension in Paris, that some serious disease of the femur, or even of the hip-joint, was the cause of the abscesses from which the Prince is known to have suffered. His inability to be present at the opening of the Exhibition tended to increase this anxiety. We are now informed that the Empress is indisposed, her health having been shaken by her anxiety and constant watching by her invalid child. Under the care of their distinguished attendants, both patients will receive all the alleviation that art can afford, and we hope both will shortly be restored to their usual health.

The London College of Physicians.—Who is to be the next President? That is the question just now occupying the Fellows. Much regret has been expressed that Sir Thomas Watson, who has been so thoroughly popular, should wish to decline the honour of again being re-elected. While, however, he may fairly expect to be relieved from the further performance of the arduous duties of the office, we doubt not either of the gentlemen who have been mentioned as likely to succeed will, if elected, prove equal to the position. Each of them may, naturally enough, hope to give general satisfaction, and, we trust, whoever may accept the honour may be able to maintain the reputation of the ancient college, if not increase its prestige.

A Narrow Escape.—At the Spring Petty Sessions, last week, a woman named Harrison charged Mr. Saunders, surgeon, of Chigwell, with an attempt to commit a rape upon her in her own house. She declared she screamed, and that at length her servant came, but her husband, who was within hearing, did not. The story completely broke down in court—so completely in fact, that Mr. Sleigh, who had been retained, withdrew from the prosecution, and Mr. Saunders was declared by the Court to leave without a stain on his character. But had the prosecutrix engaged some unprincipled barrister, instead of so honourable a man as Mr. Sleigh, to how much extra expense and anxiety he might have been subjected?

Dr. Richardson's Lectures.—On the second instant Dr. Richardson, whose numerous contributions to science have made his name so familiar, and to whom a testimonial has been raised principally in consequence of his ingenious application of cold by the ether spray for producing anæsthesia, commenced a series of lectures on experimental and practical medicine, at his house in Hinde-street, Manchester Square. The first lecture was on a new styptic and adhesive fluid, which he calls styptic colloid, and on healing by the first intention. We listened to the lecture with the greatest pleasure, and can testify that it was well received by an unusually influential audience. It is quite a new thing in London to have lectures at private houses, but Dr. Richardson has proved that a man with something to communicate will find no difficulty in obtaining an assembly outside the walls of a hospital. He will continue the course on the first Tuesday in each month. We wish him the success he deserves, and advise those readers who may have the opportunity of attending to purchase tickets.

Strange Coincidences.—Few people but have occasionally indulged themselves in some reverie or even neutral expressions respecting the curious coincidences that sometimes occur among the lesser events of every day life. The other day a gentleman remarked to us that he had never known more than three persons whose names commenced with a certain letter of the alphabet, and had never heard a person's name commencing with a certain syllable of three letters. The conversation over, he went to his consulting room, and, curiously enough, the first patient's name began with that very three-letter syllable, and the two next patients' names commenced with the same letter of the alphabet. Each reader will probably be able to parallel this from his own experiences.—In turning over the leaves of a recent number of this journal a rather strange coincidence struck us. In one column was an account of the proposal to eject Mr. B. Brown from the Obstetrical Society of London; in another an item of news in which that gentleman's name is also mentioned, being in fact a description of a testimonial of plate which has been subscribed for, and is now on view at Mr. Benson's, the jeweller, of Bond-street. The curiosity of the thing is, that neither contributor knew anything about the other contribution; so that each, on reading his copy of the journal, could learn from it something in odd contrast with his own information. We should add, that the same week the two same facts were brought prominently into notice by a considerable number of newspapers.—Another very singular fact respecting the same affair is that on the 15th March, the reader of the *Times* who glanced over the advertisements might have been astonished by his eye lighting upon the following in the second column of that journal, where are always placed certain, private and strange, announcements, and which is, from the character of its contents, sometimes sportingly called the "agony column":—

"The London Surgical Home.—The porter (called Brown) who was engaged at the above institution in September last, is requested to make an early appointment with Mr. W. Talley, Solicitor, 13, Piccadilly, W., on business of public importance."

Such a method of waging war as this is not likely to add to the dignity of gentlemen belonging to a society for promoting science, nor to the respect with which their decisions on points of ethics will be regarded.

The Register of Medical Students.—The official list of students registered during the year 1866 has just been issued by the Medical Council. It gives in parallel columns the name of the student, date of registration, certificate of preliminary examination, and place of study. We have taken the trouble to prepare an analysis of the last column, but we publish it rather as an evidence of the inaccuracy of the returns and the inefficiency of the registration system, so far as it has gone, than as affording any reliable information. The extraordinary disproportion in the numbers attending different schools indicates some fault in the machinery by which these registrations are effected. The following are the returns:—

Number of Students attending in the Medical School of the United Kingdom.

London.

Guy's Hospital, 85; University College, 54; St. Bartholomew's Hospital, 47; St. Mary's Hospital, 41; St. Thomas's Hospital, 29; King's College, 28; St. George's Hospital, 21; Charing-cross Hospital, 7; Middlesex Hospital, 6; Westminster Hospital, 4; London Hospital, 3.

Provincial.

Birmingham, 22; Manchester, 21; Cambridge, 17; Liverpool, 15; Bristol, 14; Newcastle, 13; Leeds, 12; Hull, 6; Oxford, 3; Sheffield, 2. All others, 21.

Ireland.

Ledwich School, 38; Royal College of Surgeons, 25; Queen's College, Cork, 24; Carmichael School, 21; Queen's College, Galway, 18; Catholic University, 11; Trinity College, 8; Steevens' Hospital, 7.

Scotland.

University of Glasgow, 110; University of Edinburgh, 75; University of Aberdeen, 52; Anderson's University, Glasgow, 27; Royal College of Surgeons, Edinburgh, 13; Surgeon's Hall, Edinburgh, 1.

Total number of students registered, 901.

SURGICAL SOCIETY OF IRELAND.

The President of the College of Surgeons, Dr. Butcher, in the Chair.

LATERAL OPERATION OF LITHOTOMY FOR THE REMOVAL OF A CALCULUS FROM A PATIENT WHO HAD BEEN SUBJECTED TO LITHOTRITY BEFORE HE CAME TO DUBLIN.

The President made the following remarks on the operation of lithotomy:—

Gentlemen,—I thought it would be interesting to submit to your consideration the details of a remarkable case of calculus in the bladder, upon which I operated this morning in Mercer's Hospital, and making such remarks as I think applicable to the subject. The patient was a labourer, aged 65, and a sufferer from stone for over four

years; throughout the greater part of this time his sufferings were excessive. Four months ago the stone was detected by an able surgeon in the country, and lithotrity performed upon him. A few fragments were broken off and expelled from the bladder; severe symptoms of irritation set in, and no further attempt made of breaking up the stone. A few weeks since he was sent from the country and placed under my care. The patient suffered most intensely after the journey. The day of his admission into the hospital, he was writhing in torture, ever trying to pass a few drops of water, and always an aggravation of suffering after the effort and the issue. The usual means for subduing inflammation and irritation of the bladder were had recourse to. The warm bath, hot stupes over the vesical region and perineum, the internal administration of sedatives and antispasmodics, together with wine and demulcents, and strong broths to sustain the wearied powers of life. I would wish to lay great stress upon the necessity of attending to position in cases similar to the present. The hips and loins of the man were raised upon pillows far higher than his chest and head, which lay on a horizontal plane, the object being to allow the stone to fall back from the irritated and most sensitive neck of the bladder, and so when the organ even was empty that its weight should be directed by gravity backwards. After some time the patient's sufferings were comparatively lessened, and by a perseverance in the adoption of those means which I have alluded to, with but little variation for some days, the urgency to make water and the rapid demands to do so were not so oppressive. From being up some ten or twelve times in the night, and nearly as often by day, as was the case on his first admission, tranquil rest at night for a couple of hours together was insured, and probably as long intervals of repose by day; nevertheless, the case was still a very extreme one, surrounded with difficulties and risk. On examination by the rectum, the prostate was discovered considerably enlarged, the lateral lobes, almost in equal proportion (the right half somewhat the larger), forming a large massive tumour. Seven days since, I sounded the man to make *certain* of the presence of the stone, of which none of the equivocal symptoms were absent. The greatest gentleness was adopted in the introduction of the sound, yet it was by no means an easy matter to make it lightly travel over a very rugged urethra. The size of the instrument employed was a medium one (No. 9) of the catheter scale. On the conveyance of the instrument into the bladder, extreme torture was experienced, as scarcely any water could be retained, either by the efforts of the patient or by artificial supply. The bladder would not distend, therefore the range of the sound was very limited. I then passed the index finger of the left hand into the rectum, and felt the bulging of the bladder backwards, and through the coats of it and those of the rectum readily felt the stone and lifted it up to the sound, striking upon it with a sharp audible click not to be mistaken, and recognisable some feet from the bed. Certain now as to the presence of the calulus, its locality, and the pathological state of the viscus itself, as well as that of the prostate and parts around, I at once removed the sound as quickly as I could, and with as much gentleness. I measured the stone and found it to be in one axis an inch and three quarters, and an inch in another. Considerable irritation was set up after this examination, and days of the most careful management were required to subdue it. In addressing an assembly of practical Surgeons such as I see around, it is not necessary to specify the means more minutely than I have adverted to as having been adopted on the reception of the patient into the hospital. I may add, however, so tardily did the excitement subside that I determined on not again sounding him. From the contracted condition of the bladder, the enlarged prostate, the enfeebled state of the man from repeated suffering, now that a time of repose was obtained I considered it most advisable to remove the stone by the lateral operation from the bladder, and so give the man a chance for his life. The patient being prepared for the operation, the rectum cleared out by an enema last evening, and this morning by warm water; as no urine could be retained in the bladder, a small quantity of tepid water was thrown in, not more than a wineglassfull, as the bladder would not relax; and so he was brought into the operating theatre, placed under chloroform, the staff passed, bound hand and foot after the ordinary mode, and brought to the end of the table. The ordinary incisions were adopted, and the bladder rapidly reached with the knife, shaped as figured in my work on "Operative Surgery," the instrument being, of course, larger for the adult subject. I did not find it necessary to use the blunt-pointed knife. The index finger of the left hand passed along the staff lay within the neck of the bladder, and then the staff was withdrawn, and upon the finger the blunt gorget conducted to the bladder, and by the gorget the forceps. The gorget being taken away, search was made with the forceps for the stone, but the bladder was so contracted, and the prostate so large, that it could not at once be discovered. I quickly passed the index finger of my left hand up the rectum, and lifted the stone into the chops of the forceps, and commenced to extract. A good deal broke away from the stone, and it slipped loose, but by the same manœuvre I instantly caught it again and extracted a large piece fully the size of a hazel-nut—this being the nucleus, and pronounced by Dr. Haughton to be composed of oxalate of lime. I next with the forceps and scoop removed a large quantity of considerably-sized fragments and a good deal of detritus, and then washed out the bladder. I present to you the stone all crushed, together with the large nucleus, as it was removed. Besides the large quantity there, there is nearly as much more detritus drying on bibulous paper. The "canule à chemise" was next introduced, and fastened by tapes in its position—the man unbound and placed in bed, with his thighs tied together, and a pillow supporting his hams. There was not a tablespoonful of blood lost, and but a very few moments passed in executing the operation. I shall now dwell upon a few practical points in relation to this operation, and first as to the position of the man when brought to the end of the table. Before the knife is used, I would urge the necessity of having the soles of the feet to rest upon the table, by such position the accurate axis of the pelvis is insured, and one conversant with the anatomy of the region cannot err either in the application of the cutting-knife, or from the proper line of traction with the extracting forceps. Now, as to the staff, it was such as I have described in my work on "Operative Surgery;" the side upon which the knife is lateralized, that is the right side of the staff, when introduced as presented, to the operator, should be a little lower in its edge than the opposite side; this arrangement allows the knife to be turned outwards sufficiently without lifting its point from the deep part of the groove of the staff, which might endanger its slipping; and it likewise preserves the sharp edge of the knife from injury in the effort to lateralize it when the staff is held, as it should be, perfectly straight and well up to the pubis. The staff should never be rested upon the stone, and, as it were, made a guide to it; no, the staff should be held, I say again, tight up to the pubis, and so it keeps the knife out of harm's way behind. When the bladder is fairly cut into, there is sufficient time to be solicitous about the stone. I mentioned I did not use the second knife in this instance; but when the wound in the prostate is to be enlarged, it is the most manageable and safe of all instruments; it is so narrow in its blade, and guarded at its end by the blunt point. Now, with regard to the formation of the end of this knife, I would wish to say a word: If, after the membraneous portion of the urethra is laid open throughout, the surgeon wishes to complete the incision through the prostate with this knife run along the groove of the staff, it is essential the blunt end of the instrument should not be long; the one I employ is not more than the eighth of an inch, and for this reason: if the upper part of the blunt end of the instrument rises out of the groove in the staff, it is apt to hitch against the fibrous bands and structures, essential to be divided in its onward course to the bladder, which obstruction may tilt

the blade from the staff altogether, and facilitate its going in a wrong direction. I have mentioned that the more fragile portions of the stone were broken when grasped by the forceps; had I not been able to extract it through the small aperture which I made into the bladder, I was prepared with a lithotrite to break up the stone, rather than increase the opening in the diseased prostate and irritated structures around. Under similar circumstances, I would always recommend this practice, rather than use violence or the knife freely. The "canule á chemise" I use in all cases after the operation for lithotomy, both in the young and old, left in, according to circumstances, from eight and twenty to eight and forty hours, or even longer; it at once averts, by its support, any weeping from the track of the wound. When it *is in* it may be used most advantageously if intermediary hæmorrhage should set in after reaction is established; it at once secures a ready outlet for the urine coming into the bladder, it guards against any gluing-up or plugging of the channel from the bladder, which, under other circumstances, I have seen to occur, and it is all advantageous to the surgeon in those cases where his incisions may not have been as direct as they should be, in preventing extravasation. I may just conclude by saying I have seen the patient just before coming here to-night, and, in every circumstance, he is going on most favourably.

[Since going to press, Mr. Richardson has received the following letter from Mr. Butcher regarding the progress of his case of lithotomy:—

Sir,—In answer to your enquiry about the case of stone upon which I operated and made some observations at the meeting of the Surgical Society held on the 29th of March, I am happy to tell you the man is nearly well, the wound being almost healed. He is improved in the most remarkable way in appearance, and free from all suffering. It is now a little more than a fortnight since the operation.—My dear sir, yours faithfully,

Richard G. Butcher,
President of the Royal College of Surgeons.

April 12, 1867.

To B. Wills Richardson, Esq., F.R.C.S.I.,
Hon. Sec. Surgical Society of Ireland.]

Mr. Banon, Vice-President of the College, made the following communication on a

REMARKABLE CASE OF OVARIOTOMY.

The subject of ovariotomy is one which, within the last ten years, has created much discussion among surgeons, and indeed it is only within a very recent period that, by the labours of Clay, Tyler Smith, Spencer Wells, Baker Brown, and several other distinguished men, principally English practitioners, that it has been raised to that important position in surgery it now occupies. The comparatively few instances in which it has been performed in this country, may render the case which I am about to bring before the Society of more than ordinary interest. Some few years ago the propriety of having recourse to this operation was considered by most surgeons as more than doubtful, but from the great success which has recently followed its adoption, in suitable cases, its recognition as an established operation is fast becoming generally acknowledged. It may still, however, fairly be questioned whether a proceeding which in itself must involve much danger to the patient's life, should be undertaken, no matter how favourable it may be for the operation, where the progress of the disease does not threaten life or cause much or serious suffering. In the case which I shall have the honour of detailing to the Society, we were delivered from this difficulty, as such were the severity of the symptoms and the prostration produced by them, that it was evident the operation alone afforded any hope of prolonging the patient's life, even for a few days. I shall now give the history of the case as taken by Mr. M'Mullen, one of the resident pupils of Jervis-street Hospital.

"Margaret N——, ætat 17, admitted into Jervis-street Hospital, January 4th, 1867, under the care of Mr. Banon, labouring under a large abdominal fluctuating tumour, from which she suffered great distress. The account given by her mother was the following:—In February, 1866, she was led astray by a young man, and five weeks subsequently, when going to work at Chapelizod Mills, near which she resided, she fell, and her left inguinal region was bruised from coming in contact with a stone. She returned home and complained of deep-seated pain in that situation. However, no inconvenience resulted until the middle of the following June, when she observed that the abdomen was becoming enlarged, and continued to do so until last December, when she consulted Dr. Maguire, who recommended her to the hospital. The catamenia continued regular until the month of November, when they ceased, and have not since reappeared. The abdomen was much distended with fluid, emitting a dull sound on percussion in all its parts, and large distended veins were observed ramifying over its surface. Between the pubis and umbilicus fluctuation was not evident, the tumour here presenting a more solid character, and much resembling the gravid uterus of about the fifth or sixth month.

"A consultation was now summoned, at which several of Mr. Banon's colleagues attended, and also Dr. Beatty, who made a most minute examination of the tumour generally, and also of the uterus through the vagina. Some doubt existing as to the nature of the lower solid portion of the tumour, itwas agreed to tap at the upper portion of the swelling, by which eighteen quarts of a fluid of a dirty brown colour was removed, containing an enormous quantity of albumen. This was done on the 15th of January. The measurements of the abdomen previous to the operation being fifty inches round the waist, fifty-four round the largest part of the swelling, and twelve from the ensiform cartilage to the pubis. Considerable amount of solid matter remained in the region of the uterus after the tapping, but Dr. Beatty satisfied himself by a careful vaginal examination, assisted by Mr. Banon's colleagues, and by Dr. Kidd, who passed the uterine sound, that it was unconnected with the uterus, and, finally, the diagnosis of ovarian tumour was made, and an operation for its removal decided upon when the patient's strength, which was much weakened, would warrant it. The fluid, however, again so rapidly collected, and the debility of the patient, her pulse being very weak, and varying from 116 to 120 beats in the minute, becoming so much aggravated, that Mr. Banon was again obliged to tap in one month exactly from the first tapping, to save the patient from impending death, from the effects of the pressure of the fluid on the diaphragm. On this occasion nineteen and a half quarts of fluid of a lighter colour, but loaded with albumen, were drawn off with much relief, the measurements of the swelling being still greater than when previously taken. It was now agreed to continue every possible means to bring up the patient's strength, and to take advantage of the first favourable opportunity to operate, but in one fortnight after the last tapping on Thursday night, the 7th of March, at half-past eleven o'clock p.m., Mr. Banon was sent for, and found the patient in such distress that he was obliged to tap her for the third time, and drew off nineteen quarts of fluid. It was now so evident that the patient's life could not be prolonged many days, unless an operation were performed, the 18th of March was fixed in order to give time for the cyst to fill to a certain extent. On the day previous, however, the patient was so weak, the pulse being scarcely perceptible, that the idea of operating on the following day was abandoned. She rallied somewhat during the next two days, and the operation was finally undertaken on last Saturday, the 23rd. The condition of this poor girl previous to the operation was very unpromising. Her pulse was very weak, compressible, and 120 in frequency. The fluid was again beginning to cause much distress, preventing her from lying down with any comfort, the stomach also frequently rejecting her food. The measurements immediately before the operation were, as taken by Dr. Walsh—largest girth at umbilicus forty-six inches, from ensiform cartilage to symphisis twenty-three and three-quarters, and umbilicus to pubes eleven and a-half. The operation was commenced, the room having been heated to a proper temperature, and all the preliminary arrangements made, as recommended by Dr. Spencer Wells. Mr. Banon being assisted by his colleagues, Dr

J. S. Hughes, Forrrest, M'Swiney, Tyrrell, M'Donnell, and Martin, and by his friends Drs. Beatty, Gordon, Walsh, Hargrave, Kidd, and Geoghegan. Chloroform having been administered by Dr. M'Swiney, an incision five inches long, extending from below the umbilicus to within an inch of the symphisis pubis was made through the skin, and the subjacent tissues carefully divided on a broad director until the peritoneum was fully exposed. This membrane was then raised with a small double hook at the lower end of the wound, and slit up on the director for the whole of its extent. The cyst then came into view, and on passing the director between it and the parietal peritoneum it was at once felt to be extensively adherent to the latter membrane. The cyst was now tapped with Spencer Well's large trochar, and at first but little fluid escaped, but on pressing the trochar backwards and upwards it entered the large cyst, and between fifteen and sixteen quarts of fluid rapidly escaped. Mr. Banon now passed his right hand freely into the abdomen, and endeavoured gradually to break through the very strong and extensive adhesions to the front wall, and both sides of the tumour. In this he succeeded with difficulty, being obliged to use considerable force. It was found, however, that the tumour was still firmly adherent above and behind, and to render it more manageable it was again tapped in two or three different places, and about two quarts more of fluid obtained exit. He now endeavoured to draw out the tumour after separating firm adhesions at its upper part in close connection with the suspensory ligament of the liver, and behind to the stomach and colon, but found the solid matter was of too great a size to pass out of the opening. He therefore enlarged the incision to the extent of an inch and a-half at its upper part. The whole tumour now passed completely through the wound with the greater part of the great omentum closely attached, after separating which the pedicle was treated in the following way and the whole tumour removed :—

"The pedicle was found to be very short and broad, and on raising and looking through it, was found to contain several very large arteries and veins. Under these circumstances it was considered that the ordinary clamp would cause too much tension from the shortness of the pedicle, which, it should have been mentioned, was attached close to the uterus on the left side, and, fearing to trust entirely to the actual cautery from the number and size of its vessels, Mr. Banon passed a double ligature of hemp-twine through its centre, taking care, with the aid of good light, to avoid transfixing a vessel with the point of the needle, and tied one on each side as firmly as possible. The pedicle was then cut through and the tumour removed. Not the slightest oozing of blood appearing, the ligatures were cut short, and the pedicle stump allowed to drop into the pelvis. On examining the interior of the abdominal cavity, Mr. Banon found there was rather considerable oozing of blood from several points on the front wall of the abdomen in the site of the adhesions. These were carefully seared with the hot iron with complete success, and it being now found that bleeding was taking place from the torn omentum, it was ligatured in two places with silver wire, the ends being carefully turned in, and the omentum beyond the ligatures divided, and removed by the hot iron. All clots and fluid were now carefully sponged out from the abdomen and pelvis, and the right ovary examined and found healthy, and no bleeding point being anywhere observed, the wound was closed in the usual manner by three deep silk sutures passing through the peritoneum, and between them superficial sutures of silver wire. Broad straps of adhesive plaster were applied, and over them French wadding and flannel, and the patient carried to a well-warmed bed.

"The patient bore the operation remarkably well, considering her very weak and almost collapsed state previous to it. Mr. Banon stated that he owed much to the assistance afforded to him by his colleagues, and Drs. Beatty and Walsh during the operation, and for Dr. Beatty's invaluable assistance and advice before, during, and subsequent to the operation, he expressed himself grateful. On the patient being settled in bed, and the effects of chloroform had passed away, it having been admirably and effectually administered, her general condition could not be regarded as much more depressed than it had been previous to the operation ; respiration tranquil ; pulse 138, weak, but quite perceptible. An enema, containing brandy and beef-tea, was administered, and india-rubber heaters applied. An hour after the operation she had rallied so far that the pulse came down to 130. The catheter was passed, and six ounces of urine withdrawn, which was about the same amount taken away before the operation. No albumen at any time existed in the urine.

"At four P.M. the pulse had come down to 120, and was of a better volume. She now complained of some pain, and an enema, containing twenty minims of tincture of opium, directed ; the bowels had been previously moved ; brandy and beef-tea injections directed every four hours, and iced soda-water and milk by the mouth.

"Half-past nine P.M.—The patient continued in much the same condition, the bowels having acted several times. Another enema containing twenty-five minims of tincture of opium was administered. During the night she had some hiccough and nausea, which was relieved by ice; no vomiting. The brandy and beef-tea injections were continued, and the urine drawn off at intervals of five hours.

"Sunday, 24th.—This morning the pulse 120, weak; had slept for short intervals ; complained of hacking cough and wheezing in the trachea, and of slight pain in neighbourhood of incision ; no vomiting. Treatment to be continued. To have the following mixture :—

℞ Mucilaginis.
Syrupi similacis aa. ℥iv.
Liquor hydrochlor. morphiæ ℥i.
Aquæ ℥ii.

M. cap. cochl. med. urgente tussi.

"Monday morning, 25th.—Pulse 134, weak; cough quite gone ; enemas well retained ; urine abundant; pain somewhat increased. Opium by injection as before. Took nothing by the mouth but milk and soda-water, iced, and a little chicken-broth, which latter the stomach rejected twice when administered. Cannot be induced to take any stimulant by the mouth. Deep sutures removed.

"Tuesday morning, the 26th.—The patient now suffers distress from tympanites and increase of pain ; pulse during the night varied from 120 to 128 ; countenance expressive of suffering. Ordered one grain of opium by the mouth every second hour. To have spongio-piline wrung out of hot water, and sprinkled with turpentine, applied over the abdomen, and renewed every second hour, and a drachm of mercurial ointment rubbed into each groin, to be repeated in four hours. An enema containing one pint of water, with half an ounce of turpentine, beaten up with yolk of egg, injected with long tube, and to be repeated in the evening if necessary. Injection brought away a number of scybala and some flatus with much relief. During this day she vomited three or four times, and the tympanites continuing, another terebinthinate injection was administered with some relief. In the evening two drachms of mercurial ointment, at Dr. Beatty's suggestion, were again rubbed in. Brandy and beef-tea injections continued, and also spongio-piline stupes. Pulse 120, stronger. Having taken four grains of opium during the day, the interval to be increased to three hours during the night, and the pills to be omitted should symptoms of narcotism come on. Has taken a little port wine ; iced soda-water and milk agrees best with the stomach ; chicken-broth again came off when tried ; beef-tea and brandy continued by the rectum in two-ounce enemas every second hour.

"Wednesday morning, the 27th.—Slept a good deal during the night. Tympanites still troublesome. But slight tenderness on pressure has been at any time felt in any part of the abdomen, though sore to the touch. This day the superficial sutures were removed. The deeper portions of the incision appear to be healed, but the skin not so. Scarcely any discharge is observed. Pulse 124, stronger. Mercurial ointment again to be rubbed in, and half an ounce of turpentine in half a pint of water injected.

"At six P.M. a large blister was applied below the epigastrium, where the tympanites is greatest, and directed to be dressed with mercurial ointment. Some port wine was taken through the day, and a little chicken-broth in the evening, which remained on the stomach; pulse keeping up, 120.

"Thursday morning, March 28th: Got a good deal of sleep during the night, and appears on the whole improved; pulse 120, stronger. Vomited once, but slightly, during the night, and then only the chicken-broth; opium directed to be continued, one grain every third hour; tympanites somewhat less; terebinthinate enema to be given in course of the day, and mercurial ointment to be again rubbed in; slight tenderness on pressure still present over abdomen; spongio-piline stupes still to be continued. She this morning craved for a little chicken, which was given and well retained, as well as some port wine; did not vomit during the day; pulse came down to 116; general aspect much improved; is more cheerful, and bore moving from one bed to another well; had a second bit of chicken in the evening, which agreed with her well; much inclined to sleep; opium to be omitted unless wakeful during the night.

"This morning, March 29th, seventh day after the operation, slept well during the night; effects of opium now passed off; to be resumed every third hour as before; injection of turpentine and assafœtida administered, bringing away scybala and flatus with relief; has taken wine and iced soda-water and milk, and now asks for an egg and some tea, which has been given; no vomiting; pulse 120, stronger; ordered to continue beef-tea and brandy by the rectum, and stupes as before; back becoming slightly sore from pressure; sacrum to be protected with soap-plaster; was again changed to another bed with great comfort. No mercurial fœtor or sorenesss of gums produced by the mercurial ointment.

"At six o'clock this evening she was seen by Dr. Beatty and Mr. Banon. Her general aspect much improved; her voice, which was all through weak and indistinct, has greatly recovered its tone, and she is more cheerful and hopeful; pulse 120; had been earlier in the day as low as 116; still slight tenderness on pressure; retains fluid better; egg, chicken, and tea agreed with her well. Dr. Beatty saw the patient morning and evening regularly since the operation with Mr. Banon, and agrees with him in thinking that her present condition is much more favourable than could have been hoped for under the circumstances."

The details of this case I have given from the notes of Mr. M'Mullen, one of our resident pupils, who, with Mr. Kelly, alternately sat up with this poor girl every night since the performance of the operation, and both these gentlemen rivalled each other in the attention they paid her. Both Dr. Beatty and myself now entertain some hopes of her recovery. To this gentleman I am not alone indebted for his devotion and kindness, with which most of us are familiar, when we have the good fortune to come in contact with him, but also for the extraordinary amount of talent and acumen evinced by him in mainly assisting us to form a correct diagnosis in this very obscure and remarkable case. Before concluding my remarks, I may state that perhaps the most remarkable circumstance observed in this case was the extraordinary rapidity with which the fluid was secreted and the sac refilled after each tapping. In the numerous cases I have read of, described by Spencer Wells and others, I have not yet met one in which the fluid was poured out so rapidly. In the short period after the last tapping of one fortnight it will be recollected that between seventeen and eighteen quarts of fluid had collected. The great vascularity of the cyst may, in some degree, account for it. It may, perhaps, be said that an earlier operation should have been had recourse to, but it must be recollected that the diagnosis was extremely difficult, and a correct one only arrived at by the most patient and careful examinations, and then the extreme weakness of the patient would induce many surgeons not alone to pause, as we did, but to abandon all idea of an operative proceeding. It was finally undertaken to give her her only chance, it being the opinion of all who saw her that a few days more of such suffering as she was undergoing would, inevitably, terminate her existence.

Her present condition, though much more favourable than we could have hoped for under the circumstances, must be regarded with much uneasiness as to the final result, which I shall not fail to communicate at a later period.—At present all that can be said of the operation is that it has already probably prolonged her life, which was in immediate danger previous to its being undertaken, and it has most certainly relieved her in no small degree from the intense and intolerable sufferings she was undergoing.

On examining the sac, which was carefully done by Drs. R. M'Donnell and Barker, it was found to be exceedingly vascular. It formed the bulk of the mass, and through one portion, which must have been close to the falciform ligament of liver to which it was attached, an artery as large as the radial at the wrist was found divided, and the veins ramifying over the different parts of the tumour were enormous. The base of the tumour, near the pedicle, was composed of many minor cysts, most of them containing clear straw-coloured fluid; a good deal of solid matter existed at this portion of the tumour composed of fibrous tissue. In two of the cysts flocculent shreds of fibrine were found, and in one a considerable quantity of cheesy matter remained.

Dr. Barker, who kindly examined the interior of the cyst, which Dr. R. McDonnell had not an opportunity of doing, states that on examining the internal surface and solid portions of the cyst, he found (corresponding to the anterior wall of the cyst) two fungous growths, about six inches from each other, of the size of a large walnut, attached by a broad base. They were soft and friable, and presented somewhat of a malignant aspect; their roots, too, were a little vascular. A microscopic examination with a quarter-inch object glass indicated cells of an epithelial character. Several very fleshy masses were also found in several parts of the cyst, from which exuded (when cut into) different kinds of matter—pus from some, a clear gelatinous fluid from others, and from one or two a clear matter resembling colloid.

These appearances are, no doubt, suspicious, and calculated to give us uneasiness as to their being of a cancerous nature, which time only can remove. The patient is young, and previous to the occurrence of this disease, enjoyed uninterrupted good health. Let us hope, then, that, should she survive the operation, her former robust health may be restored to her.

Dr. Beatty wished to supplement this very important and carefully reported case by a few observations. In the first place he would say, as far as the operation itself went, that he never saw an operation performed more perfectly and more satisfactorily than this one. It would strike any one who witnessed the case that instead of being Mr. Banon's first operation it was his fiftieth; and if this woman recovered—for her life was still very much in the balance—it would be owing to the great attention which Mr. Banon had paid to the after-treatment—a subject on which the President had expressed a strong opinion in his comments on ovariotomy. Mr. Banon had described this case as a most unfavourable one, as a case in which the chances of recovery were very slight; and it might be asked "why, then, should he undertake an operation on an individual so close on the brink of the grave as this woman appeared to be?" He (Dr. Beatty) had brought with him the last volume of the "Proceedings of the Obstetrical Society of London," in which a very important passage occurred relative to a discussion on ovariotomy that took place in the last session of the Society. It was a portion of the observations of Mr. Spencer Wells. "Success in ovariotomy," said Mr. Wells, "did not depend upon any professional routine in any one step of the operation, but upon all the steps in the operation being well done by experienced men in properly selected cases. By this he did not mean that unfavourable cases were to be rejected. Far from it. If a patient were dying, and there was any reasonable prospect of saving her, and she was willing to run

a great risk, it became a duty to try to save her life. Only that day he operated upon a patient in the last stage of hectic fever, from a suppurating cyst, with a pulse of 140, and with scarcely a hope of success, because there was just a chance with the operation and none whatever without it. But to say there should be no selection of cases, and that the surgeon should do ovariotomy upon every patient with ovarian disease who came before him, was simply idiotic. As reasonable beings, we must refuse to do a serious operation where the disease, on the one hand, is one that does not threaten life, and, on the other, where it is of such a nature, that operation would be almost necessarily fatal." Acting on the principle there laid down, he counselled Mr. Banon to perform the operation. We considered the woman was dying rapidly. She was most desirous of relief, and, as far as the case had gone, Mr. Banon had every reason to congratulate himself on having undertaken the operation; for, before this time, if the operation had not been performed, the woman would most probably have been dead. As to some of the steps of the operation, he would say a few words. Mr. Banon alluded to the manner in which the pedicle was treated; and he (Dr. Beatty) was happy to say that the proceeding of expanding the pedicle, looking through it, endeavouring to discover the transparent parts of it, was first adopted in this country in the first operation which the President performed in Mercer's Hospital. There was no allusion to such a proceeding in any of the cases recorded by the eminent operators who had previously written on the subject; and it was due to Dublin, and to the President, to say that it was here that proceeding was first adopted to ascertain the proper place where the needle could be passed through the pedicle with safety. For it was notorious that a needle passed through a pedicle at haphazard, without care having been taken to avoid the blood-vessels, had sometimes caused an unfavourable result, from the circumstance of some of the blood-vessels becoming transfixed by the needle, and the delay and bleeding which resulted, causing the death of the patient. This operation was most successfully performed by Mr. Banon. The after-treatment, as he had detailed it, was founded on the common principles of surgery. It was quite plain that peritonitis, not of an acute, but of a low kind, had attacked the patient; and the medical treatment mentioned by Mr. Banon had been adopted so far with success. The peritonitis was met by the throwing up of turpentine, which not only assisted in the expulsion of fluids, but by its very existence in the intestines was a stimulant in itself—one of the most healthy stimulants that could be introduced into the mucous membrane of the bowels under the circumstances. The woman's life was in the balance. She had now passed through her seventh day, and he was inclined to believe she would recover. Her countenance was cheerful, her eye bright, and she was able to take solid food. He need not tell them that a woman with a pulse at 120 and the bowels still tympanitic was in a precarious position, but it was possible that her life would be spared, and if so she would owe her recovery to the skill with which the operation had been performed, and the extreme attention paid to the after-treatment of the case.

The Rev. Dr. Haughton asked whether Dr. Banon considered that the tumour had a traumatic origin.

Professor Hargrave said he had witnessed this operation with very great interest and attention. There was great difficulty experienced in forcing the adhesions, but that difficulty had been overcome by Mr. Banon. After the tumour was cleared away, Dr. Banon examined into the condition of the right ovary, and it was declared by him and Dr. Beatty to be perfectly healthy. He thought these ovarian tumours must be considered almost as foreign bodies, and the sooner they were removed the better, instead of leaving them to increase and destroy the patient. By removing these tumours early they incurred less risk of inducing peritoneal inflammation, than if they waited until the tumour had attained a larger size. There was another point to which he wished to advert. He was happy to find that Irish surgery was returning to its birthright. These operations had now been performed in Dublin in the most skilful manner, and the treatment which had been adopted in the case just brought before the Society was in accordance with physiological and pathological principles. Contrasting this operation with that for strangulated hernia, he would call attention to the fact of how frequently they had patient's suffering from peritoneal inflammation in the latter, and the rule was death. Here it was remarkable that there was but little peritoneal inflammation, although the abdomen was laid open, the bowels examined, and the actual cautery used.

Mr. Tufnell observed, with reference to strangulated hernia, that very frequently the peritonitis was set up before the operation, where the operation for strangulated hernia was performed early, death was not so frequent as when it was deferred to a later stage.

Professor Hargrave, in concurring in this view, said that when about to tie the common iliac artery, which he did for aneurism last session, a gentleman said, why not go direct to the vessel and disregard the peritoneum as ovariotomists do?

Dr. John Barker—With respect to the pedicle in these cases, he had examined some ten or a dozen of them, and he found that they consisted nearly entirely of blood-vessels, the arteries being very much smaller than the veins, which were very large. He had found great difficulty in perfecting a good injection of the ovarian cyst, in consequence of the extravasation occurring in the inside, the support of the fluid having been removed.

Dr. Geoghegan said there was one point on which it was desirable to have the opinion of practical ovariotomists—namely, whether the peritoneal inflammation, which resulted in some cases, was due to the cutting short the pedicle and allowing the ligature to remain in the abdomen?

Dr. McDonnell said a lady, a relative of his own, had an ovarian tumour five years ago, for which he tapped her. Some time afterwards she returned to a distant part of Ireland and was again several times tapped; after the sixth tapping the sac suppurated, and she was for many days in a dying state. For three weeks her death was almost momentarily expected. Nevertheless, she completely recovered, and was able to go about now as well as he ever remembered her. He thought it right to mention this case at a time when it was not quite determined whether ovariotomy should be legitimately introduced into surgery, not that he did not himself entirely adopt the view that the operation was one which should be legitimately introduced and looked on as an established operation.

Dr. Beatty remarked that the case mentioned by Dr. M'Donnell was not without example. Inflammation of the sac set in, pus was discharged into it, and like the case of hydrocele, the sac collapsed, contracted, and there was no further effusion of fluid. It was what used to be attempted by injection of iodine into these enormous sacs of ovarian disease, a process which he had himself used. On one occasion on the third injection of iodine, intense inflammation was set up and pus secreted as the result of the operation, and the woman finally recovered. He need not say that that operation had been abandoned now from the number of failures that followed it, and the number of successes that followed the entire extirpation of the sac. With respect to the use of the clamp, he would read a passage from the remarks of Mr. Spencer Wells, on the occasion already referred to. This point had occupied the attention of all ovariotomists. Some men preferred the clamp until a late period, and Mr. Wells, who had fought for it a long time, now seemed disposed to abandon it. The ligature of the pedicle had been adopted by Dr. Tyler Smith, and he had had the greatest amount of success in his operations. His invariable practice was to to put a ligature on the pedicle and drop it into the pelvis. Mr. Spencer Wells observed—"With regard to the use of the cautery in ovariotomy the cases brought forward certainly proved that we had been taught an additional and successful mode of dealing with the pedicle. But it also convinced him that it should be an exceptional and and not a general method. The number of cases

in which ligatures had been also required, the accounts of melting and flaming fat, the case required as to the precise temperature of the irons, the slowness of the searing, the effects of disturbing the eschar, and the very frequent suppuration of the abdominal wall were very unsatisfactory. And the argument, that because out of twenty completed cases only two had died, therefore this success was due to the use of the cautery, was clearly untenable. For it was a curious fact that of the last twenty-two cases of ovariotomy in which he (Mr. Wells) had been able to secure the pedicle by a clamp only two had died, and one of these lived twelve hours, and died of cancer of the peritoneum, which was not detected before the operation." Mr. Wells had lately come round to the cautery. In the last letter he had from him he said, "I am this day to perform my two hundred and second operation." Of those, he had saved one hundred and forty lives, and he (Dr. Beatty) thought a gentleman who could say that was worthy of being quoted in the Surgical Society of Ireland.

Dr. M'Clintock believed the most important point in connection with the performance of this operation was the manner of disposing of the pedicle. Judging from the analogy of other cases in surgery, he thought that no one particular mode ought to be pursued, and that the surgeon must be guided by the peculiarity of each special case, as to what plan he should adopt, whether to retain the pedicle with a clamp, or divide it and drop it into the abdomen, as was done by Dr. Tyler Smith, or to use the actual cautery. With reference to the use of the ligature, perhaps the general opinion that the presence of the ligature on the abdomen was an exciting cause of peritonitis had been too hastily adopted.

Dr. Beatty said that the pedicle had been ligatured and dropped back into the abdomen over and over again with great success. In one case, Dr. Tyler Smith found, on making a post-mortem examination, that the ligature was surrounded by lymph, and was not the exciting point of any inflammation in the peritoneum. In another case when the patient died of peritonitis, it was found that the spot in which the ligatures were, was the only part of the cavity that was not the subject of peritonitis—showing clearly that the ligature was not the cause of inflammation.

Mr. Banon said he had been asked whether this tumour was of traumatic origin? They knew nothing about that until after the operation, and therefore could not answer the question. If they had known what the mother told them before the operation, it might have inclined them to fix the growth from the left rather than from the right. With respect to the observations of Prof. Hargrave as to the absence of peritonitis after ovarian operations compared with operations for hernia, there was one reason which might account for it. The peritoneum, where an ovarian tumour was present, was accustomed to a foreign body, and this rendered it less likely to take on an active form of peritonitis. As to the treatment of the pedicle he fully agreed with what Dr. Beatty said, and also with the observations of Dr. McClintock, that the operation must vary according to the circumstances of the case. In such a case as the present the clamp would have produced embarrassment. His colleague, Dr. Hughes, wrote to the gentleman who assisted Mr. Spencer Wells to send him the newest irons for searing, and he sent them over and expressed his belief so strongly that this was the best mode of all that they were determined to pursue it. They had the irons ready and prepared, but when they came to examine the pedicle, the vessels were found to be so extremely large, the veins particularly, that they were afraid to trust to searing alone. With regard to the observations of Dr. McDonnell as to this operation not being yet completely recognized, he thought that where nearly seventy-five per cent. of the cases under the treatment of Mr. Spencer Wells had recovered, where, in many of those cases but a short period would have elapsed before the disease proved fatal if the operation had not been performed, where the operation was distinctly the cause of saving life, and where the proportion of recoveries was greater than in many other capital operations, there should be no hesitation in recognizing ovariotomy, if it were not already recognized, as a legitimate surgical operation.

[We understand the patient has died since the report was sent to our office.—Ed.]

MELANOTIC TUMOUR FROM A CALF.

Dr. John Barker said—Mr. President, I shall trespass but very briefly on the attention of the Society in bringing under their notice a tumour of a character not often seen in man, though occurring more frequently among the lower animals. It is what I would call a true melanoid deposit in a fibrous matrix. It was taken from the neck of a calf, and is remarkable for its size, its weight, its pendulous nature, and the appearance a section of it presents under the microscope. Tumours of this kind are sometimes found in animals having a white or reddish skin or coating of fur, and in these there seems to be an aggregation of pigment particles found in animals of a darker hue into one part. Persons, too, of a very white skin are more frequently affected, and in them moles are said to be the parts which change into melanoid tumours. In the lower animals it does not often affect the glands, and so may be of a local character. Though black deposits are found generally in more situations than one in man, it is associated with malignant disease. The tumour presents on section an intensely black colour uniform throughout, although it has been in spirit of wine for many months, and a microscopic examination showed minute pigment particles of about 1-10,000th of an inch in diameter imbedded in a fibrous network. Paget states that in melanosis in man the pigment particles are about 1-5000th to 1-3000th of an inch in diameter, which agree with what I have generally found, thus bearing some proportion to the size of the blood corpuscles; but in this case the particles are very minute, the blood corpuscles being about 1-4500th of an inch in diameter in the calf. I send round a sketch of their size and appearance in the microscope, and in my microscope on the table are some of the particles amplified about 900 diameters. The specimen was brought to me from the shambles, and it may be a very grave question how far animals thus affected are fit for human food.

Correspondence.

POISONING BY DISEASED VEAL.

TO THE EDITOR OF THE MEDICAL PRESS AND CIRCULAR.

Sir,—May I ask you to publish the following imperfect account of some cases of poisoning by diseased or putrescent veal, which occurred in my dispensary district in June, 1866. I am sorry I have not preserved better notes of the cases, and that my time is so occupied at present that I can give but little of it to writing this statement. Dr. Cross of Strangford preserved full notes of the cases sent to the Union Hospital, and he also saw some of my cases, and he purposes, I believe, to publish his notes.

On the 23rd June, 1866, three persons purchased each a quarter of veal, in the Market-square of Newtownards from the same butcher. One of the quarters was taken to the house of a man called Smyth, about three miles from Newtownards, and used there. On Sunday, soup made of the veal had been used *scantily* by the family, and no bad consequences followed, but on Monday the veal itself was eaten by Smyth's family, and by two persons he had at the time assisting him in labouring a field, and all these persons took ill five or six hours afterwards in the same way—with vomiting, purging, burning sensation in the abdomen, thirst, a strong desire for cold drinks, occasional tormina, and a feeling of sinking weakness. On Monday though so ill they thought the purging and vomiting by removing the cause of the sickness would cure them, and they took no medicine, and on Tuesday the same notion prevented them seeking medical advice, but on Wednesday the 27th they procured a dispensary ticket, and all became my patients. I found Hugh Smyth, aged 63; Robert Kerr, aged 25; John Gibson, aged 10; Jane Smyth, aged 36; Ellen Headley, aged 10; Jane Armour, aged 3, Thomas Headly, a child, age not

stated; and the mother of these children also, whose name was not entered in the ticket, eight persons in all, all ill in the way described.

Hugh Smyth died on the evening of the 30th June, the sixth day after eating the veal, and Robert Kerr died on the morning of the 3rd July, eight days after eating the veal.

The skin of Hugh Smith, Robert Kerr, and John Gibson became blue to a considerable extent on Thursday the 28th, and with Smyth and Kerr, remained so, until they died; the blueness was best marked on the thighs and body, it disappeared on pressure, and did not depend on subcutaneous effusion of blood. The same blueness occurred a little later, and not to the same extent in the other cases. In none of the cases, so far as I observed, did the hands and feet become blue. In none of the cases was the breath cold at any time, and at no time was the discharge from the bowels like the rice water evacuations of Asiatic cholera patients. The intellects of Kerr and Smyth were clear up to very shortly before death. In none of the cases was there sopor coma, convulsions, epilepsy; no cutaneous eruption of any kind occurred in any of the cases, except a speck or two of vesicular eruption in Gibson's face.

Those who recovered were slow in regaining strength. There was nothing like the consequative fever of cholera in any of my cases. I should have stated that the secretion of urine was arrested in all the cases while the purging continued, but when the purging stopped, there was no difficulty in getting the kidneys to act.

As to the treatment, I deem it unnecessary to detail it. I gave stimulants, astringents, cinchona bark, applied sinapisms, warmth, nourishment, and every means I thought likely to stop the vomiting and purging, and sustain the strength. I did not at any time give capsicum.

An Englishman called Troppe, bought one of the quarters of veal, and he and his wife ate a *little* of it fried at one time with bacon, and at another with beefsteak; they were ill after using it, and disliking its appearance did not consume it all. They suffered from pains in the head and back, and general unwellness. The Englishman had bathed in the sea on the day he first tasted the veal, and thought he had got the pains, &c., from bathing.

A woman called Cork bought one of the quarters, and her sister's family used the half of it, and her own family part of the other half; both suffered in the same way as Smyth's family. Cork's sister's family got a dispensary ticket on the 27th June, but before I got time to visit them they had gone to the Union Hospital. On the 29th June, I prescribed medicine for Cork, her daughter, and her father, they had been ill much as Smyth's family, but not so badly.

On the 4th of July I was examined at one of the sittings of an inquest held on the bodies of Smyth and Kerr, and gave it as my opinion that their deaths were caused by poisoning—the veal they had eaten, owing to disease or incipient putrescence, having acted as an irritant poison. I was asked to make a necroscopic examination of Smyth and Kerr, and declined. Dr. Armstrong removed the viscera, and these and some portions of the veal were examined by Dr. Hodges, of Belfast, but no mineral or vegetable poison was detected by him. I think it well that Dr. Hodges was employed by the Coroner, as his evidence—considering his acknowledged competency as a chemist—must remove all possible doubt from the case. At the last sitting of the inquest, on the 24th July, 1866, Dr. Hodges was *not* present, and his letter stating that he could find no poison was not admitted as evidence, though its contents were stated. The jury found that the deaths of Smyth and Kerr were caused by eating *poisoned* veal.

On the application of some parties a further investigation of the case before the magistrates was ordered by the law officers of the Crown, and this investigation, at which Dr. Hodges was examined, resulted in the case being sent to the Down assizes for trial.

At the Downpatrick assizes, opened on the 15th instant, the two butchers who had sold the veal were tried for having sold meat unfit for human food, and thereby caused the death of Hugh Smyth, *and were acquitted.* If I understood the Judge right, he stated, in charging the jury, that in order to convict the butchers, it must have been proved to the satisfaction of the jury—1st, that the veal was unfit for human food at the time they sold it; and 2ndly, that they knew it was so unfit at the time they sold it. His opinion seemed to be that there was considerable probability that the veal, owing to the hot weather, had undergone a change between Saturday and Monday, and this was more likely, as the Corks had used some of it on Saturday, and the Andrews and Smyths on Sunday, and no bad effects had followed, and that it was on Monday the veal had produced the sickness which ended in the death of Smyth.

At the same assizes, the farmer who sold the calf to the butchers was to have been tried on a charge similar, I believe, to that made against the butchers; and when the Crown found that the evidence was not thought sufficient to convict the butchers, they entered a *non prosequi* in the farmer's case.

It had come out in evidence at the Coroner's inquest that the calf was dropped on the 17th June; that nothing was observed wrong with it until the morning of the 23rd June; that then the farmer found it ill, and went to a field and told one of his men to go in and cut its throat; that the man went to do so, but before he cut its throat *it had ceased to move;* that immediately after its throat was cut, it was taken to Newtownards, and sold for 4s. 6d. It also came out that the cow had been observed to be ailing two days before the 23rd; that this ailment was attributed to a wetting she had got; that she got no medicine until the evening of the 23rd, and that she died and was buried on the 28th or 29th June, I forget which. At no time had the calf been fed exclusively on its dam's milk, but on her milk mixed with the milk of two other cows. As to the disease of which the calf died we are in the dark; but there seems much probability that the cow died of inflammation of the uterus. I should have stated that it was also proved that the cow had not fallen off much in her milking until Saturday or Sunday, the 23rd or 24th. At one time I felt sure that the calf had died of the disease called "black quarter," as one quarter of it has not been traced, but from what I have heard I deem it probable that the whole four quarters had been sold. Something may yet, however, be discovered as to the missing quarter; it is not proved it was sold. Black quarter is well known here.

That veal in a diseased state, or in a putrescent state, is adequate to cause poisoning is well-known. That different effects would have followed in these cases from any other known poison, I think, may be safely affirmed.

Copper and its compounds would have been followed by coma, or convulsions, or paralysis, or jaundice, or faintings, or ulcerated gums. There were no such effects.

The compounds of mercury would have caused salivation, sore throat, or tremblings, or difficult deglutition, &c. There were none of these.

Arsenic would have caused irritation of the bladder and urethra, depressed action of the heart, palsy, or epilepsy, or a pustular eruption, &c. There were none of these.

Lead would have caused quite a different class of symptoms, as would oxalic acid.

No disinfecting liquid could have been put on the veal in such quantity as to cause poisoning after the washings to which it was submitted.

A vegetable poison would have acted more on the nervous system, and idiosynacrasy of constitution had nothing to do in the matter, as five or six families all suffered alike. That the cases were cases of Asiatic cholera cannot be held, as the symptoms differed from cholera, and as about fourteen persons who had eaten veal, and these alone, were attacked, and the disease progressed no farther.

The case seems to me a very important one, and, no doubt, will attract the attention of toxicologists. I am sorry it did not fall to the lot of some more competent person to give the cases I treated to the public.

I may mention that in the DUBLIN MEDICAL PRESS of the 9th and 16th of July, 1862, there are a number of cases of death caused by eating diseased veal given from the writings of Mr. Gamgee that are well worthy of perusal. I may also state what is perhaps indeed well known to all the readers of the MEDICAL PRESS AND CIRCULAR, that in 1862 Dr. Letheby published his opinion that the sale of the flesh of animals that had died, the flesh of animals that had been killed while suffering from inflammatory disease, and also the flesh of animals killed while ill of any lingering and emaciating disease should be prohibited as unfit for human food. It would be well were there some public enactment to this effect, many lives would be saved by it.—I am, sir, your obedient servant,

D. JAMISON, M.D.

P.S.—A piece of intelligence which may amuse some of your readers has come to my knowledge through a reliable source. When a farmer has had a case or two of black-quarter among his calves, the following means of prevention is advised and practised here. He is to hang up in the kitchen chimney a bone of one of the legs of a calf that had died of the disease.

This will keep black-quarter from the homestead, it is alleged. Yet the schoolmaster is as busy here as any where else.—I should have stated that the bones of the quarter of veal eaten by the Smyth family were given to a large strong young dog, and produced vomiting, purging, and prostration in him, and that he did not recover quite, for about ten days.

CONSTITUTIONAL SYMPTOMS FOLLOWING SOFT CHANCRE.

TO THE EDITOR OF THE MEDICAL PRESS AND CIRCULAR.

SIR,—In the MEDICAL PRESS AND CIRCULAR of the 3rd inst. there are some very interesting details of a case lately under the care of Dr. Angus M. Porter. In that case a sore throat (followed by severe inflammation commencing in the conjunctiva of the right eye) appeared a month after the primary affection. As Dr. Porter remarks, the whole case presented an "uncommon aspect" for one of constitutional syphilis. Taking into consideration the entire absence of any eruption of the skin, the absence of any ulceration in the throat, and absence of any other syphilitic symptom, I am much more inclined to regard the case as one of ordinary secondary inflammation in an enfeebled constitution than one in which secondary syphilitic disease followed a soft sore.—I am, sir, your obedient servant, HENRY LEE.

CONTRACTION OF THE LEG FROM GUNSHOT WOUND OF THE THIGH SUCCESSFULLY TREATED BY SUBCUTANEOUS DIVISION OF THE HAMSTRING MUSCLES.

TO THE EDITOR OF THE MEDICAL PRESS AND CIRCULAR.

SIR,—Believing that great benefit would be conferred on the community by the more general adoption of the practice of tenotomy which has been hitherto comparatively neglected, I beg to furnish you with the details of a case in which this treatment has been eminently successful, and by which a most deserving professional gentleman was restored to the use of his limb, although some few years ago he would be placed among the pitiable class of incurables.

Dr. Richard Vickery, Assistant-Surgeon of the 2nd Michigan Volunteers, whilst serving with his regiment at the battle of Petersburgh, Virginia, in June 1864, was summoned to attend some wounded soldiers, and with that contempt for danger, and regard to duty, which always characterize Military Medical men, he hastened to render assistance to the sufferers, and whilst so engaged, was hit by a Minnie rifle-bullet on the external surface of the right thigh; the ball traversed the deep-seated muscles, grazed the posterior surface of the femur, passed between the principal nerves and blood vessels, and escaped in front about six inches above the knee-joint. Although none of the great arteries had been wounded, considerable hæmorrhage took place, and profuse suppuration, and some sloughing occurred, as a portion of the clothing had been carried into the wound.

The patient was, I presume, attended to as well as circumstances would admit of, but by degrees contraction of the limb took place, the leg was bent at right angles to the thigh, firmly fixed in that situation, and did not admit of extension, however the hinge-like motion of the joint still existed, and encouraged me to perform the operation, which subsequently proved quite successful.

(OPERATION, PERFORMED AUGUST, 1866.)

Putting the internal hamstring muscles forcibly on the stretch, a sharp-pointed bistoury laid on the flat, was passed in under the integument of the thigh, and carried over the internal hamstring, the cutting edge of the knife was then brought in contact with the semitendinosus tendon, which was divided; the same proceeding was adopted with the semimembranosus—the division of both tendons being attended with a perceptible snap; the knife was again turned on the flat, and carefully withdrawn from the aperture, which was closed by a pledget of lint; the tendon of the biceps flexor crusis was then divided in a similar manner.

In conjunction with my friend Dr. Hadden, we made such pressure on the knee-joint as brought the leg into a direct line with the femur, and retained it in that position by means of a hollowed splint, which extended from the middle of the thigh to the upper portion of the tendo achillio; the leg and thigh were then carefully bandaged, and kept in an extended position for about a fortnight; after a few days the external wounds were entirely healed, and but very little inflammation set in.

On examining the limb, we found that it had regained its natural position. Amesburg's splint was then placed on the under surface of the knee-joint, and, by aid of the screw, the extension of the limb was gradually kept up for nearly two months, after which period Dr. Vickery was able to use the leg, and when last I saw him, he could walk about unaided, although he had been for months before the operation unable to move except on crutches.

By a newspaper, which I have lately received, I find he is perfectly restored to health, and the perfect use of his limb, and has been appointed to a surgeoncy in the army of the United States, in which position I am sure he will, if required, exhibit the same skill and humanity that distinguished him on a former occasion.—I am, sir, &c.,

DANIEL DONOVAN, M.D.

MR. BROWN AND THE OBSTETRICAL SOCIETY.

TO THE EDITOR OF THE MEDICAL PRESS AND CIRCULAR.

SIR,—Allow me a word or two more in your excellent journal on the subject now uppermost in the profession. But first of all I wish to say that I am not a friend of Mr. Brown: so far from it, that I have never spoken to him, not even seen him at any time. On the other hand, I am not acquainted with any Member of the Council, nor have I spoken to any Fellow of the Society on the proposition before them, but take my views solely from what I have read at various times.

Leaving, then, the points at issue between the Obstetrical Society and Mr. B. Brown, and consequently forbearing to express any opinion as to the justness of the sentence passed on him by the Fellows in their vote on Wednesday evening last, there is one thing which must strike every one who attentively reads the charges and the reply, with a view of judging fairly of the case. No one can fail to see that the Council have acted, in one particular, most disingenuously, to say the least, towards Mr. Brown. After the discussion on Dr. Tanner's paper, he had evidently come forward and courted inquiry with regard to the operation in question. He it was who first offered to the *Lancet* on 3rd November last year, jointly with the editor of that journal, to nominate a committee to report on the subject, and agreed to abandon the practice if their verdict was adverse. Nothing resulting from this proposal, he offered to place twelve or twenty cases at the disposal of Dr. Tanner, who went to the Surgical Home and commenced the examination; but the *Lancet* of the 12th January urged the Council of the Society to appoint three gentlemen to investigate the point, and about the same time a similar recommendation was made by the *British Medical*, in consequence of which Dr. Tanner discontinued his visits, and Mr. Brown communicated with Dr. Meadows for the purpose of having a committee of enquiry appointed. Five Fellows were named, and Mr. Brown arranged to propose them, but, at the request of Dr. Meadows, left it to Dr. Hall Davis who had agreed to nominate the committee at the next meeting on the 2nd January, but who for some unaccountable reason had failed to do so. Mr. Brown then on the 7th January addressed a letter to the Council requesting a fair and impartial investigation, and offering every facility in cases in his own practice. After this, three weeks passed, and no notice whatever was taken of this letter, when a friend, who was a Fellow of the Society called on him and told him that several councillors instead of considering his proposal were agitating his removal from the Society. He then on the 31st January wrote to the President begging to withdraw his previous letter, when five days after one of the Secretary's wrote to acknowledge the receipt of both letters, and to say that as no meeting had taken place, they had not been before the Council. In the meantime meetings were held on the 15th and 25th February, and on the 27th a circular was sent to the Fellows, to Mr. Brown among the rest, to say it was the opinion of the Council that he should be expelled the Society.

Now what impression is made by these facts upon a candid and impartial mind? Is it not plain that Mr. Brown has been open, and that he has courted investigation? Has the Society reciprocated his openness? Suppose Mr. Brown deserving the brand they have endeavoured to put upon him, have they conducted themselves like fair and honourable men? Does not the feeling somehow or other insinuate itself into the mind, and will it not spread to every impartial observer, that instead of a just ground of condemnation, at bottom there was thorough prejudice and dislike. Or if such was not the case, and if they were perfectly justified in getting rid of Mr. Brown, still the manner in which it was done, explain or disguise it as they may, will be a lasting discredit to the Society.—I am, sir, your obedient servant, FAIR PLAY.

ANSWER TO MR. THOMPSON'S CRITIQUE OF DR CAPLIN'S ELECTRICAL SYSTEM.

TO THE EDITOR OF THE MEDICAL PRESS AND CIRCULAR.

DEAR SIR,—In reply to the article referring to me, which appeared in No. 13 of the present volume of your valuable journal, I beg to say that I feel much obliged to the writer for giving me the opportunity of explaining to him what he does not not appear to understand.

I admit with Mr. Thomson, that men have in all times propounded "ridiculous theories," but for my part, I do not find this wonderful, but merely simple, natural, and desirable, since it proves the avidity of the human mind for an increase of knowledge, so as thereby to arrive at the discovery of truth.

Were it otherwise, man's intelligence would remain at a stand-still, and science make no progress.

It is but too true that amongst the various theories and systems which have been introduced in course of time, many have proved to be very ludicrous; and it appears from what Mr. T. says, that he has come to the definite opinion that I am one of the unfortunate individuals who labour in the dark to arrive ultimately to shew in light of day their ridiculous presumption and ignorance.

As a matter of course, I cannot be a competent judge in my own cause, but, at the same time, I do not clearly see that Mr. T. has the right to assume the position of a critic on a subject of which it appears he has very slight knowledge. I do not know Mr. Thompson's age, nor the time he has devoted to the study of medical electricity; nor the experience he has acquired in the practice of that science. For myself, I must confess that I have spent about thirty years of my life, and laboured very hard too. Now, it appears that I have been mistaken during all that time. It is not certainly my fault, and I do not think Mr. T. is justified in turning my efforts into ridicule, and to cast reproach upon me for my perseverance. Whatever may be the result a man arrives at, it is either good or bad. I think it bad to try to discourage him. We must not contract the human mind. We must not frighten any man who labours in the field of science with the fear of being branded some day or other if he has not succeeded in his researches, because no one would endeavour to make new discoveries. On the contrary, I think it would be most rational, more christian-like, to encourage and help him, rather than to try to deter him. I think that, in all circumstances, indulgence is more becoming a gentleman than coarseness or insolence.

According to my humble opinion in matters of science, we should discuss coolly, bring forth arguments, and prove by good reason whether a man is either right or wrong, and to have the question decided by the verdict of a large, dispassionate, disinterested, and competent jury.

And, notwithstanding, we again find that the generality of men are sometimes wrong and mistaken. For instance, the great philosopher Pythagoras propounded the idea that the heart was the seat of the soul. Not only did he make innumerable disciples, but that idea was, for the time, adopted amongst most civilised nations; and this opinion was so strongly enrooted that even now it is said, in speaking of either good, bad, or indifferent people, that they have a good heart, a bad heart, or no heart at all; whilst the merest tyro in anatomy knows that this viscus is merely a hollow muscle, entirely destitute of intellect, thought, or mental faculties. Pythagoras was living B.C. 584—that is, 2451 years ago. That philosopher entertained a very erroneous opinion, although he was so scientific a man, and highly reputed for his extensive knowledge. Is he to be deemed a fool? Still his theory was wrong—very wrong.

By the side of this example we have an opposite one in Galileo, who was the first to discover the earth's rotation. Nobody would believe him, and he was persecuted for having emitted an erroneous doctrine. However, he was right in spite of the universal opinion against him; and if truth had not prevailed in course of time, we should neither know nor be able to account for all the phenomena on our globe.

Another victim to common prejudice of certain individuals, or societies of men, was Harvey, who discovered the systematic circulation of the blood. He was ridiculed, and branded by his colleagues with the friendly epithet of madman; and the Royal College of Surgeons at the time exacted from the candidates before granting them a diploma an oath that they would neither adopt nor propagate Harvey's theory. Which was most in the right—the persecuted victim of truth, or the phalanx of his opponents?

I might also name Jenner, with his theory of vaccination, and many others, who had to contend with the whole Profession before they succeeded in making the truth heard which they had discovered. It is well known that new discoveries and innovations of every kind have always met with opposition, nor do we know what effect the dread of this sort of perpetual war may have produced upon men of genius, but of timid dispositions. Perhaps many a noble truth has been lost through the intimidating influence of the many against one. Now, it is clearly evident that all the detractors of the systems above alluded to were perfectly ignorant of the fundamental principles to which they were opposed.

My theory is not a fabrication of my own. I found the principle on which it is based existing already in nature. There is nothing in it, then, of my own invention. What does belong to me is only the mode of application, and of that I do not make a secret.

Mr. T. is quite correct in supposing that I would put electricity in the place of what Hunter calls the "materia vitalis," or Müller the organic force. Only I would term it the "*vis universalis*," since, in my opinion, all the phenomena of the universe—vegetable and animal—owe their life to this subtle fluid, which is everywhere, and permeates all created nature.

I presume that Mr. T. will not deny the influence of the *sun* upon all that exists. Can he inform me what the sun is? Of what it is composed? and by what means it warms our atmosphere? and the earth's surface to its very centre? On the solution of that question we are all obliged to confess our ignorance. We may call its action, a power, an influence, if we please, but that is all; we cannot define it. Now, I ask, what power on earth, is more similar to that of the sun than electricity? It is a fluid incoercible, infallable, imponderable. Like the sun it produces light, heat, incaudescence, ignition motion, &c., it is found everywhere, and is perpetually in action; yet, we know it only by its effects. But who can describe its nature if it is not an universal power, since living matter, animal and vegetable, is part of the universe. We are under its influence for a wise purpose. According to the Divine will, it is in us, for our good, even before our birth. It is, as it has been properly termed, the *vital principle*. If so, we cannot exist without electricity. Nevertheless, we may be deficient in electricity without losing life. For want of food we lose our strength, and we should die from starvation if our body was not supplied with new aliment. It would be the same if we were deprived of the vital principle, since, for want of it, we could not digest, for the chemical action would be suspended, and consequently life itself extinguished.

I persist in my opinion, that the human body is a decomposing machine. I use this word, because there is no other by which I can express my idea. I might call it a "vat," a "trough," a "cell," a "receiver," &c.; but, as the body moves, and is endued for the purpose of motion with the six mechanical powers, and even the three kinds of lever, I have called it in my lecture on Deformity a "living machine."

I regret that I could not make myself understood by Mr. T., though it is not to be much wondered at, as we have no technical language on the subject. I said in my article on Electricity, that it is cause and effect, and effect and cause.

I will endeavour to explain myself more fully that my meaning may, if possible, be apprehended.

It is a fact established and founded on scientific data, that no decomposition takes place in nature without evolving electricity, but sometimes this takes place in so small a quantity that a delicate electro-meter is required to ascertain its presence, still it is there, and is consequently the primary cause. But, according to the nature of the substance in decomposition, and the arrangement of our apparatus, we can increase electricity as we like, and thereby create a power. Thus, decomposition is the cause, and its effect a power.

Then, we employ that power for again producing decomposition; in this case electricity becomes as an active cause of further decomposition.

Lastly, Mr. T. arrives at the conclusion that it would be more rational to attribute the formation of electricity to the invarable processes which are constantly going on during life. In that respect, we are of the same opinion. I shall conclude, therefore, by observing that if Mr. T. has not understood me, the fault is probably my own; but it is difficult to be explicit when we are limited for space.

It may be very absurd, as Mr. T. says, to compare the body to a steam-engine, and the stomach to a boiler; but it is the best simile I can find to express my idea, for the most familiar examples often illustrate our thoughts the best.

As I before remarked, I cannot assume the right to be judge

in my own cause, and can only say that it was very far from my intention to amuse myself on chimeras, or on fantastic conceptions. I have worked hard to establish my theory by well-ascertained facts, and I scarcely believe that my researches are merely due to a "fertile imagination."

At all events, I thank Mr. Thompson for his *critique*, which is written conscientiously and in a cordial spirit, and I shall be happy to hear from him again.

If he will do me the favour of visiting my establishment, I shall be proud to afford him the means of investigating more fully my system and judging of it for himself.—I remain, dear sir, faithfully yours, J. Caplin M.D.

[We must do Dr. Caplin the justice to observe that in this and former correspondence he has put forward the empirical practice, which he advocates in a fitting spirit of scientific discussion, and not at all in the tone of narrow-mindedness usually adopted in such controversies.—Ed. M. P. & C.]

FEMALE PHYSICIANS.

TO THE EDITOR OF THE MEDICAL PRESS AND CIRCULAR.

Sir,—As it is very important to female physicians that the credentials of every woman assuming their office shall be clearly known and thoroughly proved, I think it right to forward to you the enclosed statement, made by order of the Surgeon-General of the United States' Army, respecting the alleged services of Mary E. Walker, whose proceedings in London will be most deplored by those who most earnestly desire to see medicine recognized as a profession for women:—

"Surgeon-General's Office, Washington City,
"January 2nd, 1867.

"In the winter of 1863 Mary E. Walker was furnished with transportation to Louisville, Kentucky, to report to Assistant-Surgeon General Wood, who stated he could give her employment as a nurse. She was sent by him to Medical Director Perin, who ordered an examination as to her professional qualifications, and reported her incompetent for any higher position than female nurse. She was subsequently put on duty with the wounded, taken prisoner, and carried to Richmond, and released, receiving the pay of a contract physician from the time of her capture until her release.

"By order of the Surgeon-General,
"C. H. Crane, Assistant Surgeon-General,
"United States' Army."

I am, sir, yours obediently,
A Medical Student.

Boston, Massachusetts.

Medical News.

List of Entries in the Branch Medical Council (Ireland) for the month of March, 1867.

Beckett, Alexander, Moneymore, Co. Londonderry, M.D., Uuniv. Glasgow, 1852.
Watt, Thomas, Mawhinny, Ballyjamesduff, Co. Cavan, M.R.C.S.Eng., 1867
Hanna, James, Peter's Hill, Belfast, M.R.C.S.Eng., 1863.
Maher, Nicholas, Cootehill, Co. Cavan, L.R.C.P.Edin., 1866: L.R.C.S. Edin., 1866.

Medical Society of the College of Physicians, Ireland.—Seventh meeting—Session 1866-67. Wednesday, 17th April, 1867, tea at eight; chair to be taken at half-past eight P.M. Communications.—1. Dr. Marcus Eustace.—"Symptoms diagnostic of recovery in the different forms of Insanity." 2. Dr. Head.—"Notes of a case of Fatty Degeneration of the Diaphragm." 3. Dr. Hughes.—"A Case of Paralysis."

St. Mary's Hospital.—The anniversary festival of this charity was celebrated last week at the Albion Tavern, City, under the presidency of Lewis Lloyd, Esq. At the conclusion of the dinner, the usual loyal and patriotic toasts were proposed by the chairman, and received with customary enthusiasm. In proposing the toast of the evening the Chairman said that the institution was established in 1851 for the relief of the sick poor; and since that time the total number of patients of all classes who have received relief at the hospital was 219,722, amongst which were upwards of 500 cases of severe accidents. The hospital at present contained 150 beds; and the completion of the "Albert Edward" wing would furnish accommodation for an increased number of patients, and would also enable the governors to establish a ward for children. The income for the year ending December 31, 1866, was £8756 and the expenditure £8700. The Chairman, after an eloquent appeal on behalf of the funds of the charity, concluded by proposing "Prosperity and Perpetuity to St. Mary's Hospital." The toast was drunk with great enthusiasm, and the Secretary afterwards announced a list of subscriptions, amounting in the aggregate to nearly £1000; of which the Chairman contributed 200 guineas, Mr. J. P. Heywood, £100, &c. A number of other toasts followed, and the proceedings, which were enlivened by a selection of vocal music, terminated at an early hour.

NOTICES TO CORRESPONDENTS.

Communications to the London Editor should be addressed to 20 King William-street, Strand; to the Edinburgh Editor, at Maclachlan and Stewart's, South Bridge; and to the Dublin Editor, at 3, Lincoln-place.

Dr. Kidd.—Owing to pressure on our space, your paper must stand over for a week or two, when it shall be inserted if found suitable for our columns. In future, please address the "London Editor" at the office as above. Dr. Kidd would also oblige by writing a little more legibly.

TO THE EDITOR OF THE MEDICAL PRESS AND CIRCULAR.

Sir,—Would you kindly inform me if, having vaccinated a child over the age mentioned in the Compulsory Act, or an adult operated on for the first time, I am bound to send a certificate to the Registrar.—Your obedient servant, T. W. M.

[The Compulsory Vaccination Act refers only to children born since the 1st January, 1864, and the 3rd section provides that the Medical Practitioner who vaccinates a child so born should send a certificate of same to the Registrar. No penalty is provided for neglecting this duty. —Ed. M. P. & C.]

TO THE EDITOR OF THE MEDICAL PRESS AND CIRCULAR.

Sir,—In your impression of the 27th March last, I notice Mr. Blacklock in a letter alludes to Mr. Johnston's "interesting and instructive case of protrusion of the intestines through an abdominal wound," and likewise refers to a case that had occurred to him. I think these cases worthy of our greatest attention, as heretofore the reference has been scanty, and rather unsatisfactory, in regard to our knowledge of such cases.

I lately had the pleasure of hearing from Dr. Mair, at Banda Orientale, that he had treated three such cases with perfect success. Two of the cases were adults. The other was a girl. In the treatment, after replacing the bowel, he transfixed through the skin of the abdomen the protruded omentum by needle an ligature, constructed it with the ligature, and afterwards removed it by the knife. A simple compress was then applied with a bandage. The only drug administered was a dose of opium after the operation. The cases recovered admirably.

I hope Dr. Mair will ultimately publish the nature and circumstances of the cases, as I understand it is his intention to do.—I am, yours, &c.
James L. King, F.R.C.S.E.

MEDICAL APPOINTMENTS.

Bartleet, T. H., M.B., has been elected one of the Surgeons to the General Hospital, Birmingham.

Batten, R. W., M.D., has been appointed Physician to the Gloucester Infirmary, vice T. Evans, M.D., resigned.

Bramley, L., F.R.C.S.E., has been appointed Consulting Surgeon to the Halifax Infirmary, on resigning as Surgeon.

Carter, W., M.B., B.Sc., LL.B.Lond., F.R.C.S.I., has been elected Honorary Medical Officer to the Northern Dispensary, Liverpool, vice Dr. M'Caul, resigned.

Draper, W., M.R.C.S.E., L.S.A., L.M., late Resident Obstetric Assistant at the Middlesex Hospital, has been appointed Resident Medical Officer to the York Dispensary, vice T. Collier, resigned.

Langstaff, C., M.D., M.R.C.S.E., has been elected Surgeon to the Royal South Hants Infirmary, Southampton, vice J. King Sampson, resigned.

M'Dowel, B. F., M.D., York-street, Dublin, has been elected to the Chair of Materia Medica in the Ledwich School of Medicine, Peter-street.

Moon, R. C., M.R.C.S.E., late House-Surgeon at the Ophthalmic Hospital, Southwark, has been appointed Assistant-Surgeon to the Hospital.

Nowell, W., M.R.C.S.E., has been elected Surgeon to the Halifax Infirmary and Dispensary.

Shorto, J. R., M.R.C.S.E., L.S.A.L., has been elected Assistant-Surgeon to the Royal South Hants Infirmary, vice C. Langstaff, M.D., elected Surgeon.

Siddall, J. B., M.D., has been appointed House-Surgeon to the General Hospital, Bristol, vice W. Harris, M.D., resigned.

Streatfeild, J. F., F.R.C.S., late Assistant-Surgeon in the Eye Department, University College Hospital, has been appointed Ophthalmic Surgeon to the Hospital.

Vallance, T. J., M.D., has been appointed Medical Officer to the West Ham Union Workhouse, Essex, vice J. T. Vallance, M.D., resigned.

Warren Meyrick, E. W., M.R.C.S.L., &c., has been appointed Senior House-Surgeon to the Ardwick and Ancoats Dispensary, Manchester, vice John Moir, L.R.C.P.E., &c., resigned.

Wickham, R. H. B., L.R.C.S.E., has been appointed House-Surgeon to Gray's Hospital, Elgin.

Original Communication.

CASE OF "BLACK DEATH."

By JOHN HAWTREY BENSON, M.B., L.R.C.S.I., L.K.Q.C.P.I.

At the hour of 11·45 on Tuesday night the 9th inst., a note was received from the Purser Student of the City of Dublin Hospital, requesting me to visit a patient who had been admitted that evening for me, and who had been suffering from very severe diarrhœa for some hours.

On my arrival at the hospital, I found that the patient was a boy aged 14. The means used to check the diarrhœa had succeeded, and he was then in a quiet tranquil sleep; no stertor, respiration perfectly free, pulse frequent and feeble, but not remarkably so. Nothing was known of the boy beyond the fact that he had been ill for a few days, and that when admitted he was dull, drowsy and stupid. As there was, accordingly, no history, and no indication for treatment of any kind, I did not rouse him, and merely left some general directions to be followed in case of a renewal of the diarrhœa. He had an exhausted appearance, and a sallow dusky hue, but no spots or discolourations were at that time visible on the face, chest, or hands, the only parts exposed to view. He remained sleeping tranquilly for over an hour after I had left the house, but after that got restless, and had considerable jactitation. About half-past one in the morning (Wednesday), dark spots began to appear on the face first, and soon after on the arms and legs. The spots rapidly spread, and the patient quickly sunk, notwithstanding active stimulant treatment. He vomited twice, accompanied each time with a convulsion, and by six o'clock the same morning he was dead.

After his death I learned the following history :—

He was an indoor servant of regular habits, and good general health.

About a week previous to his admission he had a quarrel with a fellow-servant, when the latter lifted him off the ground, and then flung him down with violence, but he came on his feet.

No effects apparently followed this, and he seemed to remain for some days quite well up to Sunday evening, the 7th inst., when he began to feel slightly indisposed. On Monday morning, 8th, he had a stupid aspect, and is described as sitting over the fire for the greater part of the day, and poking it abstractedly, without any apparent object. On the evening of the same day Dr. Head saw him. He was then sensible, put out his tongue when desired, but did not answer when spoken to. His fists were clenched. His bladder was distended, and with the aid of a catheter, about 16 oz. of urine, slightly ammoniacal, were drawn off. A turpentine and fœtid enema was also ordered.

Next morning (Tuesday 9th) the enema was found to have acted freely. The boy answered questions put to him, but was still dull and stupid, and after being disturbed, settled down again into sleep almost immediately. That evening he was taken into hospital, and the Purser Student who admitted him describes him as having a drunken appearance, and inclined to go to sleep even in the hall of the hospital. A few hours after this the diarrhœa mentioned above came on.

Post-mortem Examination.—About thirty hours after death the post-mortem examination was made, in which I had the able assistance of my colleagues, Dr. Geoghegan, Dr. Benson, and Mr. Tuffnell, and of Dr. Head.

The body presented the following characters :—

Rigor mortis rendered the extremities quite rigid; the green colouration of commencing decomposition was already well-marked on the abdomen; every part of the body had purple spots on it; the chest and upper part of abdomen were least affected; the ears, the sides and back of neck, and the legs were most discoloured; on the legs, more especially than on any other part, there were seen three well-defined degrees of discolouration. Firstly, there was a ground, so to speak, of rather light purple, which had left but few patches of healthy-coloured skin. On face, chest, and upper part of abdomen this ground did not appear at all. Secondly, very much less-widely diffused, there were darker spots, varying from the size of a threepenny piece to that of a crown, of very irregular shape. And thirdly, there were a few very dark purple spots, almost black, scattered over every part of the body. The spots on the face, front of neck and chest, were, with few exceptions, small and rather dark—some not larger than a line in diameter. The tips of the ears were of a very dark purple, almost black; the conjunctivæ had a few dark, well-defined, purple spots, especially the palpebral portion of that membrane.

The gums had a few slight patches, but the inside of the mouth and of the fauces were quite free.

On the soles of the feet the spots were not quite so numerous as on the dorsum and sides, and were rendered paler in appearance by the thickness of the cuticle. The whole of the back of the body was of a nearly uniform darkish purple, a good deal of which was, no doubt, a post-mortem effect. The body had been lying on its back since death. Some of the darker spots could be seen through this purple ground, and some parts were pale, as the nates and back of chest, on which the weight of the body pressed, but even there the darker spots remained unaltered.

On removing the calvarium the dura mater presented an unusually bluish tint, and its sinuses and veins were unnaturally distended When this membrane was cut away, the veins ramifying on the surface of the brain were found a good deal congested; but neither on the upper or under surface of the brain, nor in its membranes, was there the least sign of recent inflammation to be found. No lymph, no pus, no effusion of any kind on or under the arachnoid. When cut the substance of the brain was slightly softer than is natural, but scarcely congested. Each lateral ventricle contained about a drachm of bloody serum. The choroid plexus was congested.

The spinal chord presented appearances similar to those of the brain. The spinal sinuses were very much congested. The veins on the surface of the chord were also turgid throughout. The substance of the same was of natural consistence, and not the least trace of inflammation was anywhere observable.

On the surface of the lungs, and throughout their substance, were found numerous well-defined black spots, about the size of a millet-seed, very uniform in size and appearance, and at a distance from each other averaging about a quarter of an inch. They were not at all like the spots on the skin or conjunctiva, but had rather the character of punctiform melanosis. There was some slight congestion, but otherwise the lungs were natural.

In the pericardium about an ounce and a-half of bloody serum was found, but no trace of inflammation.

The left ventricle and auricle were quite empty. The right cavities were tensely distended with a uniform, loose, "black currant jelly" coagulum of blood. No tendency was shown for the fibrin to separate from the other constituents of the blood. The heart in all other respects was quite natural.

In the abdomen the liver was normal in size and consistence, but remarkably dark in front, for a distance of from one to three inches from the free edge, the colour fading off gradually into the natural hue of the healthy gland.

The gall bladder was fully distended with bile. The stomach, beyond being somewhat congested, was natural. The bowels showed very little sign of congestion.

The solar plexus presented a perfectly healthy appearance.

The kidneys were slightly congested. Some serous infiltration was found in the areolar tissue around.

The spleen was slightly congested—nothing more. A portion of the blood found in the right auricle I submitted to the microscope, and the result of my examination completely coincided with what was observed by Dr. John Barker, who kindly examined it also.

The following is his report :—

"The blood presents no very distinctive characters under the microscope. The corpuscles in many parts present a

crinated appearance on the edges, so far as to give the appearance of those bodies breaking up, under pressure, into several parts, similar to what takes place when blood-crystals are about to form."

This may have been a post-mortem effect. No white corpuscles were apparent in the field of the microscope.

Observations.—This case presents one of the forms in which the terrible disease now popularly called "The Black Death" has begun to appear amongst us.

I think we have not yet found a satisfactory name for it. It does not much resemble the Black Death of the middle ages, as it wants the "inflammatory boils and tumours of the glands," "the buboes in the axillæ and groin," the extreme contagion, "the expectoration of blood," and other symptoms which marked that disease; having, in fact, little in common with it except the black spots, which are only mentioned as having occurred "in many cases."

Neither does the name "Febris Nigra" seem very appropriate, scarcely any of the characters of fever being exhibited by it.

It has been supposed to be some stage or modification of cholera, but here again the absence of cramps, and of change of voice, the exceptional occurrence of vomiting and purging, and even the marked difference in the colour and in the expression, seem to separate it from cholera. It remains for further observations to be made before we can say whether the diarrhœa which occurred in the case now reported was connected directly with the disease in question, or was merely an accidental complication.

To the theory of those who are of opinion that this disease is connected with cerebro-spinal meningitis, this case at least lends no support.

There is evidently some poisoned condition of the blood, but of its exact nature or cause there is, as yet, no proof. Neither is there, as yet, any reason to believe it to be contagious.

"Malignant purpura" conveys, perhaps, a better idea of the disease than any of the names that have yet been given to it.

Hospital Reports.

ST. BARTHOLOMEW'S HOSPITAL.

MALIGNANT DISEASE OF THE SUPERIOR MAXILLARY BONE; EXTIRPATION OF THE BONE; SECONDARY HÆMORRHAGE; LIGATURE OF THE COMMON CAROTID ARTERY; DEATH.

Under the care of Mr. HOLMES COOTE.

Angus K., æt. 45, cellarman, was admitted into St. Bartholomew's Hospital July 31, 1866, under the care of Mr. Coote. He was a pale, thin, and badly-nourished man, with a feeble circulation; and he had suffered a good deal from exposure to cold.

History.—States that about January of the present year, after unusual exposure to cold, he suffered extreme pain, of a neuralgic character, in the left cheek. This, he thought, was due to a carious tooth, which he had removed about a fortnight afterwards, but the pain still continued. About the beginning of June he first noticed the swelling in the mouth, and a small tumour first showed itself below the left lid.

Father and mother died from natural causes. Brother and sister healthy.

Aug. 4th.—Mr. Coote removed the upper jaw in the usual manner. The wound healed by the first intention and he went on favourably until Saturday, Aug. 18th, when hæmorrhage to about eight ounces came on, but ceased in about five minutes on ice being applied.

21st.—Hæmorrhage again returned to the extent of about four ounces, and was again arrested by the application of ice.

23rd, 9.30 P.M.—Mr. Orton, the House-Surgeon, was called up into the ward, and found him quite blanched from the hæmorrhage, which had again returned to an alarming extent. The pulse was not perceptible at the wrist. Mr. Orton at once proceeded to tie the carotid artery above the spot where it crosses under the omo-hyoid. The hæmorrhage was at once arrested. He was then given some brandy, and the pulse became perceptible at the wrist. He conversed, and expressed himself comfortable.

At 11.30, about one and a-half hours after the operation, he suddenly became faint, and died without a struggle.

Post-mortem Examination of the body revealed ulceration within a branch of the internal maxillary artery.

LONDON HOSPITAL.

INTESTINAL OBSTRUCTION BY VOLVULOUS AND "BAND." EXPLORATORY OPERATION.

Under Care of Mr. MAUNDER.

W. C., aged 66, was admitted with symptoms of intestinal obstruction on September 18th, 1864. Seven days before he had been seized with pain in the right iliac region, and had suffered from constipation and vomiting ever since. He was the subject of a reducible inguinal hernia on the left side, which had existed many years, and also of a bulging in the right groin both above and below Poupart's ligament; here was also a cicatrix, the result of an operation for strangulated hernia, performed five years previously by Mr. Ward.

Mr. Maunder came to the conclusion that the symptoms were not due to external strangulated hernia, neither was the obstacle to be found in the rectum. Two grains of opium were ordered at once, and a little brandy occasionally. Nine hours later the patient expressed himself better.

September 19th—Vomiting has recurred, and now, in consultation with Mr. Luke, it was deemed right to explore the abdomen. This was done over the right iliac fossa, and the finger introduced, detected a "band" passing in a direction from the right sacro-iliac joint forwards, to be attached near the internal abdominal ring. Intestines of a greenish hue; serum of a fæcal odour. The band was carefully torn across and the wound closed. Death resulted seven hours after operation, and the ninth day from the attack.

Post-mortem disclosed a volvulous of small intestine, about a portion of ileum, to which one end of the "band" was attached. Slight traces of peritonitis.

THE MEDICAL ASSOCIATION OF THE COLLEGE OF PHYSICIANS, IRELAND.

SECOND NIGHT'S PROCEEDINGS.

The debate was resumed on Friday evening at half-past eight.

The President of the College in the Chair.

Sir Dominic Corrigan, having been called on by the President, observed that there was one very gratifying feature in their debates, namely, that they came there to elicit truth, not to support their own opinions, and he was sure there was not a man amongst them who would not sacrifice his opinions if he were convinced that those opinions were wrong. The first matter he wished to direct their attention to was the map of Ireland, which he had placed before them. It represented Ireland, divided by a line from North to South, rather an unusual division. All the towns that were visited by the epidemic of 1848, '49, and '50, were marked black—that is, the towns of 2000 inhabitants and upwards, for they were obliged to put some limit to the returns. All the towns not visited were marked red. A very remarkable circumstance for which he was not prepared, was that, on the left-hand side of the line—that is, the western side of Ireland

—there was scarcely a red dot, while, on the right-hand side, they were in large proportion ; and the proportion was this, that in Ulster one-half of the towns escaped, in Leinster one-fourth of the towns escaped, in Munster one-eighth of the towns escaped, and in Connaught not one escaped. He was struck by this remarkable fact, that those portions of Ireland on the right side of the line, where there were manufactures, trade, commerce, industry, roads, and railways, presented a congeries of towns,. of which from one-eighth to one-half escaped the ravages of cholera ; while, in the West of Ireland, where there were no manufactures, no commerce, few railways, and little intercourse, not a town escaped. This was a remarkable fact, and he alluded to it in reference to a discussion which took place on cholera some time ago, when Professor Haughton stated that he was nearly converted to his (Sir Dominic Corrigan's) view, namely, that contagion was not an all-powerful influence in spreading the disease, were it not that he was convinced that cholera was brought to the West of Ireland by the reapers who caught it in England. He would not dwell further on this point than merely to narrate some facts, which would sufficiently show that these poor men did not, in addition to their other misfortunes, carry cholera on their backs; and having shown that, he thought he would be entitled to claim the gentleman to whom he referred as a supporter of his views. On looking to the report from which that map was taken, he found that the first appearance of cholera in Connaught, in the year 1849, was on the 7th of February, and that visitation extended through the intervening months to September of the following year. The cholera broke out in England in 1848. Now, the Connaught reapers who went to England in 1848, returned to their own country about July or August of the same year. The first outbreak of cholera in Connaught was in February, 1849. Taking those dates into consideration, they should then be forced to the conclusion, if they admitted Professor Haughton's views, that the reapers, having returned to their own homes in August, 1848, contrived to keep cholera as a latent burden until February, 1849. It was utterly impossible to hold that view, and he considered the question of dates to settle the matter—namely, that the Connaught reapers did not carry the disease from England in 1848, inasmuch as it did not break out in Connaught until 1849. In reference to the influence of contagion, they must take the *pros* and *cons*. He was not an advocate of any extreme doctrine one way or the other in the matter. He would mention some facts which had made an impression on his mind. The police force of Dublin consisted, in round numbers, of 1000 men. Of these, about 250 resided with their families, and 750 lived in barracks. It was an instructive fact that there were only eight cases of cholera among those thousand men, and of these six occurred in barracks, and two of policemen residing in their own dwellings. Now, of all the men in Ireland who were exposed to cholera, whether from their duties in places where cholera prevailed, or their contact with the sick poor and criminals, there were none more exposed than the police, and yet, out of 1000 men, there were only six cases of cholera, and four of these occurred in suburban districts. Again, take the workhouses. Dr. Minchin informed him that the North Union Workhouse contained about 2,000 inmates. How many cases of cholera occurred in that workhouse during the late epidemic?—and let it be recollected that the inmates of a workhouse were perpetually changing, and of all places a workhouse was, therefore, peculiarly exposed to the chances of contagion. Only two. He might mention another curious fact. Impure water had been much and often dwelt on as a cause of spreading cholera, and yet here is the description of the water used in the North Union Workhouse, in which only two cases of cholera occurred, given in the January number of The Medical Press of 1840, by Dr. McDonnell, Poor-law Commissioner :—"A year and a-half ago I saw the basin emptied for the purpose of cleansing it. It is not possible by description to convey an adequate idea of the abominable comport, from one to two feet deep, that formed the bottom of it. Gay's cloacina might, without regret, have deserted Fleet Ditch to wallow in its more congenial filth." He (Sir Dominic Corrigan) could fully corroborate that statement. The supply is still from the same source; and he mentioned it to show how cautious they ought to be in taking up water, contagion, or anything else to account for the spread of cholera. The village of Kilcock is full of beggars, and surrounded by bogs. In that village, from 1832 to the present time, a case of cholera had never appeared. If they turned to the clergy, a class much exposed to the influence of cholera, what did they find? Of the Established Church there were in Dublin seventy-six clergymen, and of the clergy of the Roman Catholic Church 137—making, in round numbers, 200. How many of them died of cholera? Not one. Of the medical profession, physicians to workhouses and dispensaries, how many died? Not one. If they turned to Sir Patrick Dun's Hospital they found that not one died. Among the authorities connected with that Hospital, there was one who had given himself heart and soul to the work of caring the poor, and had exposed himself without intermission to all the dangers of cholera—Professor Haughton. He did not die (laughter and applause) ; not one of the Physicians of the Hardwicke Hospital, or of the Mater Misericordiæ Hospital, died ; and not one of the Sisters attached to the latter institution, who bent over the dying, and devoted themselves so assiduously to attendance on the sick, caught the disease. Dr. Hayden had adduced two cases as evidence of the paramount influence of contagion. One was that a man said his wife had been in a cholera lodging-house. Now what a cholera lodging-house was he really did not understand ; but he would ask his friend to remember that in estimating what was contagious and what was not, if they derived their information from one or two cases only, they might be led astray. He thought if his friend Dr. Hayden would consider the question again, he would, perhaps, not come to such a positive conclusion from two cases. The other case which he adduced was where a man derived his information from a cabman. Admitting the facts to be true, he submitted they were not sufficiently conclusive to found upon them the theory that cholera was eminently contagious. Suppose a man tried to relieve a friend who had got lumbago by rubbing him, and that he got lumbago, it might be said he got it from contagion. He adduced this to show that, in coming to a conclusion as to contagion or not, they could not derive a satisfactory conclusion from one or two cases, but must draw their inference from an immense number of facts. It was the only way in which they could avoid error. If one thousand cases of lumbago occurred from attending lumbago patients, then, indeed, they might say that lumbago was contagious, but they could not come to such a conclusion from one or two cases only. Dr. Hayden had alluded to the island of Rèunion and to Greece; but from his experience he could say, that of all the countries in Europe in which it was impossible to carry out anything, Greece was entitled to the palm, and as for carrying out quarantine in Greece the thing was utterly impossible. The officials were most corrupt, and he was told at one of the ports that if he paid a drachma to the custom-house officer, he might pass in anything he liked from Beelzebub to Black-death (laughter). In the Cyclades, islands of Greece, there were ports frequented by steam-boats from all parts, and there were to be found Copts, Egyptians, Turks, and the nastiest set of human beings he ever saw. It would be perfectly impracticable to carry out quarantine there, and in fact it was not carried out in Greece. The conclusion he would arrive at, was not to take an extreme view of the question. He did not feel himself authorized to say that cholera was, or was not, contagious. He believed almost that any disease might become contagious. What he desired to convey was that contagion in cholera was an element far less powerful than in scarlatina or typhus. If they adopted the other view, and held that contagion was so powerful an element that our hospitals were to be closed against cholera patients, they would do a great deal of harm to mankind, both in its social relations and in its mari-

time interests. They should, he thought, look on cholera as a disease in which contagion might become an element, but its contagious nature had never yet been demonstrated. They would commit a great error if they elevated contagion as an influence beyond all others. The practical view he would adduce was this—that when cholera came among us it should be treated as any other evil; that even admitting it was contagious it was less so than scarlatina or typhus. A gentleman, for whose opinion he had a great respect, said he had been disappointed, that he had come there to listen to some improvement in treatment. Now, he looked on the debate, so far as it had gone, as the greatest compliment that could be paid to the Dublin School of Medicine—that it was eclectic; and he thought the great compliment to be paid to it was this, that it had not been lowered as other Societies had been, by men coming forward and saying that they had discovered this, that, and the other thing as a cure. There was one argument which he had often heard put forward, that cholera must be in the air, or in the water, or in the earth, and if it was not in the air inhaled by our lungs, it must be in the water taken in by our digestive organs. But did we know all the powers in nature? Might there not be some which we did not know and could not understand? It was within his own recollection that there was a time when we only knew with regard to light that it contained the rays revealed by the prism. Now it was known that there were *actinic* rays, calorific rays, and magnetic rays. A few years ago we knew nothing of ozone, iodine, and bromine. It was better for them therefore to say that as yet they knew not the cause of cholera, than to presume to come forward and say they had arrived at certain knowledge. Let them hope that by observation and reflection, by steadily cultivating those faculties which Providence had given them, they might ultimately arrive at the knowledge of the mysterious powers by which this disease, like other phenomena, spreads itself over the world. (Applause).

Mr. J. S. Comyn, Assistant-Surgeon Royal Artillery, said—As an Army Medical Officer, and an old pupil of Sir Dominic Corrigan, he would say a few words with respect to his experience of cholera abroad. He was quartered at Malta during the epidemic of 1865, and he had been constantly placed in positions half-way between India, where cholera was endemic, and this country, where it paid periodic visitations. He thought the Military Medical Officers who had spoken of cholera in India had described correctly the state of things there—that the disease struck localities, and that one passing through them was liable to be attacked by it; but in other places he thought that it travelled by human intercourse, and was conveyed by contact. In Malta in 1865 he had charge of a brigade of Artillery; they were quartered, women and children as well as the men, close to the Lazaretto of Valletta. About the middle of May there was a great alarm of cholera, and towards the end of the month the Maltese who lived at Alexandria began to pour into Malta. No cordon was established until the 14th of June, and on the 22nd of June Medical Officers were attached to the Lazaretto. They did not know therefore the exact commencement of the disease, for it was admitted that it might have been introduced by the choleraic diarrhœa, which might have been brought in by those persons. The first case broke out among his own regiment. On the 20th of June, a child was attacked and died. On the 21st of June he saw another patient. They were taken from a place adjoining the Lazaretto, which had been assigned to the married people, and which was badly drained and unhealthy. The disease occurred in six cases. On the 28th of June eight days after the outbreak, for there was at first a difference of opinion among the officers, whether it was cholera or not, he reported that the battalion should be removed to a long distance. This was not done until the 1st of July, and instead of being removed to a distance they were taken to Valletta, when five were attacked. A woman attendlng some of the patients was struck down by cholera. A few days after her death her child was sent to Valletta; one of the people who took care of the child died, another was attacked but survived. Another person living within a few yards of them caught the contagion and died. The disease went into the house of an officer whose wife and maid-servant took the disease, and the latter died; and, although cholera had not broken out last year in Malta, yet in that very house a case of cholera in all its symptoms similar to the others, except in the immediate danger of death, took place and was attended by him. With regard to India, Malta, and Dublin, the disease seemed to exist under different conditions. At Malta and other places to which it did not naturally belong, he believed it was carried from one person to another. The case of Sicily afforded a strong proof of this. There was no cholera there in 1865 when vessels coming from other parts were rigorously excluded; but last year the disturbed condition of the island obliged the Italian Government to send troops into it, and the introduction of cholera was the result. With regard to the introduction of the disease into Gibraltar he might say a few words:—The 22nd regiment started from Malta for Gibraltar, on the 6th of July, six days after the cholera had been duly reported by him. Fourteen days after that the first case of cholera occurred in that regiment, and spread from it through the town. Of twenty-six Medical Officers who were present there, many of them men of long Indian experience, he did not believe that one was a non-contagionist. His experience was that men well nourished, young and strong, were not so liable as others to the disease, and might attend the sick with impunity as did the Medical Officers, but the weak could not do this, and more readily caught the contagion and succumbed to the disease. The families of the married people among the Artillery suffered severely, and the Maltese suffered much because they were a people living on a low diet. They found that where the air was pure and the apartments large the disease did not stop. In the General Hospital of Valletta only one case arose, although they were constantly introducing the disease. They burnt the bed-clothes, and adopted other measures to stamp it out, and he believed it could be stamped out in these countries, although not in India. The measures which he would venture to suggest ought to be adopted in this or any other country to which the disease was conveyed by ships were, that there should be a port assigned for receiving vessels from all suspected places, and that this port should be under the surveillance of the police, who should be charged with the duty of carrying out the regulations made for the landing of passengers. With regard to the Ionian Islands and Greece, he fully agreed with Sir Dominic Corrigan, that quarantine was not carried out there as it ought to be. But in Malta last year, 1866, quarantine had been properly carried out, and not one case found its way into the Island, notwithstanding that it raged all around and that the embers of cholera remained; for, as he had already stated, in the same house in which an officer's wife had sickened, and her servant had died, a case occurred last year, corresponding in every respect with those cases, except in the immediate danger of death, and some similar cases occurred in Malta in 1866. In India he believed the disease did not require contagion to spread it; here it was different, and we had no excuse for not managing it as the cattle-plague was managed in England, and still more creditably in our own country. (Applause).

Dr. Head wished to bring under the notice of the meeting, an instance in which cholera seemed to have been propagated by contagion. On the map before them the town of Portaferry on the north-east coast of Ireland was indicated by a black mark; within three miles of that town there was a little village called Cloughey. No case of cholera occurred nearer to that village than Dundalk, except a few cases that occurred in Belfast, and at the time the disease appeared in the village, there was no case at all in Belfast. There was a fishing-boat which belonged to Cloughey, and which had been fishing off the coast of Dublin, near Skerries or Balbriggan. A boy on board, the son

of the captain of the fishing-boat, took ill; the father would not put him ashore here but sailed to Cloughey, where the boy was put ashore and died; the father took cholera and died, and one of the persons into whose house the boy went also took cholera. There were thirteen cases of cholera altogether in that little village, and eight died. A nurse was sent from Belfast to take charge of the patients, and she took cholera. These cases of cholera occurring in that village were distinctly traced to the fishing-boat. It was difficult to explain the outbreak of cholera in that remote and isolated locality, except on the theory of contagion.

Dr. Mapother said he would not have addressed the meeting except that the explanation of the disease which Pettenköfer had given in 1854, and which had been accepted by the first British and Continental pathologists, was not alluded to by any previous speaker. Personal enquiry in this city, Liverpool, Arklow, and other provincial towns, had convinced him of the truth of this explanation. Three things must concur for the spread of cholera —1st. The importation of the germ. Any one who considered the history of the first Dublin cases, the first Arklow cases (detailed in his "Lectures on Public Health"), or the statement of the Registrar-General and Dr. Burke, that in nearly every one of the thirty districts attacked, the first cases had been in the persons of individuals coming from places where cholera was present, could scarcely doubt the portability of the disease. The progress of the contagion in the persons of the Dutch emigrants to Liverpool, to the steamship *Helvetia*, in which the disease broke out while off Queenstown, the authorities of which, in a barbarous manner, refused all aid; its return to Liverpool, and importation to this country with something like retribution, must be convincing. The second item is residence over ill-drained places. While small-pox is due to a pure contagion, and ague to a miasm, cholera requires both agencies for its production. Pettenköfer cites the following instance in proof:—The ship *Carnatic* lay for many days outside Madras, the sailors being frequently in that town. The soldiers whom she was to convey passed directly through the town, and embarked. In four days all the sailors were attacked with cholera, while not one of the soldiers suffered, although they assiduously nursed the patients. To show the connection between the disease and ill-drained, excrement-soaked places in this city (continued Dr. Mapother) I marked on a large map the houses in which every death by cholera had occurred, and then traced in the streams which, according to Speed's and Rocque's maps, were extant in 1610 and 1756, such as the Tongue, the Bradogue, the Hoha, the City Ditch, &c.; and nearly all the cases corresponded to such obstructed and forgotten streams. The third point is, that some persons are more likely than others to catch and die by the disease; the ill-fed, the drunken, the unwashed, the ill-aired, whose blood is loaded with unhealthy fibrin; infants in whom that material abounds from the absorption of temporary organs, and the old, whose wasting tissues throw it back upon the blood, suffer most, and most fatally, as there is more pabulum for zymosis. Thus I would explain the cases of the wretched Connaught men and the fortunate policemen, so forcibly contrasted by Sir D. Corrigan. I may announce that Mr. Radcliffe's experiments for the Privy Council, just completed, prove that rats and mice take the disease if dosed with choleraic fæces, between three and five days after their ejection. As it has been stated that Indian experience is against contagiousness, I beg to refer to Mr. Orton's work, the fullest and best ever published on the disease, although issued in 1831, and to many of the late reports to the Epidemiological Society. A few words about treatment: While quinine cures ague (which it probably does by supplying a deficiency of quinoidine, a natural component of ours), the search for an antidote to the cholera poison can never be hopeless, and when malaria, which has felled scores of times as many victims as cholera, has been almost banished from these countries, we must always regard the latter pest as exterminable. I gave Calabar bean to patients in cholera collapse, as it is a direct sedative of the sympathetic system, which, I think, in that pathological state, as well as in the collapse due to a crushed limb, or to fear, is excited. Such is indicated by the dilated pupil and contracted capillaries, which produce the cold surface, the shrivelled fingers, the sunken eyes, and pinched features. Such promising agents as strychnia, warm-water packing, or rolling in cotton-wool, act indirectly as sedatives of the sympathetic. According to the reports, it appears that of eight patients in collapse who took Calabar bean, five recovered, three died—a ratio which acquits my experiment of any homicidal result.

Dr. Cruise said, as the question of contagion or non-contagion in cholera was immediately before the meeting, he thought it only right, in justice to himself and his colleague Dr. Hayden, with whom he had attended a large number of patients at the Mater Misericordiæ Hospital, to mention some facts which led him to the opinion that cholera was contagious and propagable by contact. It was quite true, if they took individual cases, they were liable to the accusation of arguing *a particulari ad universale;* but, he thought, if they examined all the cases carefully, they would find but few in which they might not trace a fair probability of contagion; in other words, he believed that, in many instances, a belief in non-contagion was due to insufficient information. He was called on in the latter part of October to see a clergyman in Clondalkin. He saw him at four o'clock in the afternoon, he was then collapsed in cholera, and died that night. This clergyman had been called upon the previous night to attend a woman in cholera. He remained with her two hours, returned to bed and fell asleep, awoke ailing in the morning, sickened about eight o'clock, and had such marked symptoms that it was necessary to call in Dr. McCrea of Clondalkin. He pronounced the case to be one of cholera, and prescribed accordingly. The woman's history was as follows:—she had a brother living at Kingstown, who had been seized with cholera and died there. She went to Kingstown to attend the wake, remained there three days, returned to Clondalkin, took cholera on that day, and died on the day following. It might be chance that caused this woman to take cholera, and chance that caused the clergyman who attended her to take cholera also, but the coincidence was, at least, very remarkable. A young woman was admitted to the Mater Misericordiæ Hospital with her child labouring under cholera. The woman recovered, the child died. What was the history of this case? The young woman lived in the county of Kildare. She had a single child which she placed at nurse in Cork-street. She heard that the nurse, with whom she had placed the child, was ill, and came up to town to see after the baby. She found the woman ill of cholera. She removed the child to a street off Marlborough-street, where they both took cholera, and were sent a few days after to the Mater Misericordiæ Hospital. He admitted that this might be all chance, but it was possible to entertain an opposite opinion. Several gentlemen, who had had large experience in India, said that cholera was not contagious. To their opinion the utmost respect was due, because their opportunities of observing cholera were much larger than we possessed in this country. Nevertheless, it was right to state, that opinions differed with regard to cholera in India. When attending cholera cases last year in the Mater Misericordiæ Hospital he met a fellow student of his own, now a distinguished surgeon in the Indian army. He asked him what was his experience of the disease in India, and he replied that it was looked on as decidedly contagious; that there was the utmost reluctance on the part of the men to attend on the cholera patients, and that there was almost a mutiny in his regiment from the enforced attendance on the sick. He said also that a large proportion of the men who discharged this duty took cholera, but not one of the officers was affected. A large number of medical students, who displayed so much earnestness and zeal during the epidemic in France, were seized with cholera, and died of it. Referring to the registry of the cases treated in the Mater Misericordiæ Hospital it would be found that a large proportion of the cases came from houses in which cholera was raging. For instance,

a case would come in from Greek-street, and it would be followed within two, three, or four days by others coming from the same house; this might be only chance, but it was only fair to admit that it was not altogether unreasonable to entertain an opposite view. For his part he quite agreed with Sir Dominic Corrigan, that the degree of contagion in cholera was not comparable to that of typhus or scarlatina. But the question of degree was not in point as regarded the question of contagion itself. The fact that cholera had arisen where there was no way of accounting for it by contact was no proof of its non-contagious nature; for he had seen cases of typhus and scarlatina arise under similar circumstances. Neither would he admit that the non-spreading of the disease was a proof of the non-contagion theory. In the Mater Misericordiæ Hospital not a single case arose from spreading within the walls of the institution; but, it was right to state, that the hygienic measures adopted there were extreme. He might quote the statement of Dr. Stokes in reference to typhus, that there had not been one case of the spreading of that disease from the fever wards of the Meath Hospital to the cholera wards. An instance occurred under his own observation, where a child was sucking when the nurse was labouring under malignant typhus, yet the child never showed a symptom of the disease; no one, for this reason, would venture to say that typhus was not highly contagious. In his opinion, if they carefully investigated all the cases of cholera they would find sufficient reason to believe that it was propagable by contagion, although not nearly so virulent as typhus, small-pox, or scarlatina.

Dr. Morrogh, H.M. Madras Army, said that he had served twenty-two years in India, and had had much experience of cholera, and that he never saw a European or a native soldier hesitate one instant to attend to his comrade who was stricken down with the disease. He made it a rule to ascertain whether the soldiers called on to discharge that duty had any fear or timidity with regard to the disease, and he had never met with an instance of the kind. His experience of twenty-two years in India had taught him that cholera was not in any way propagated by contagion. He had seen thousands of cases of cholera; he had attended it in the camp and in the field, and he had the disease very severely himself; but he did not get it from communication with the sick. He got it at a time when there was not a single case of cholera within 100 miles of where he was stationed, and he attributed it to having drank three or four glasses of sour claret (laughter). He had been exposed to contagion as much as any man could have been, but he did not take the disease in that way. He remembered two of his apothecaries being struck down. One of them was a very timid lad, very nervous and apprehensive of the disease; he was very zealous, exerted himself too much, and became greatly debilitated, and sunk under the attack. The other recovered. He thought all the medical men of experience in India would coincide with him that cholera was not contagious. Previous to his going to India he had experience in cholera. In 1832, when the epidemic was in Edinburgh, he was a volunteer in the hospitals there. After taking his degree he was employed under the Cholera Board in this country, and attended cholera in the counties of Waterford and Cork. He went to India a confirmed contagonist if ever there was one, but in that country he saw no preparations for a contagious disease. Every man who was attacked was at once sent into hospital, just as if he had a broken leg, and the disease was never communicated from bed to bed. It took him some four or five years before he got rid of the idea that cholera was contagious. As to the young gentleman from whom Dr. Cruise derived his information, he was probably ignorant of the Indian language, and did not know what the natives said to him. The native soldiers were most affectionate to their comrades. He never saw a native soldier refuse to attend his fellow-soldier; in fact, there was a religious feeling among them on the subject which would render the thing impossible.

Rev. Professor Haughton said his friend Sir Dominic Corrigan had done him the justice to say that he was willing to die in the cause of cholera, but he seemed rather to complain that he did not die (laughter). Now, whatever little service he might have rendered in the cholera epidemic, he did with the full resolution under no circumstances to die (laughter). But, at the same time, he was willing to confess that if he had ten lives or twenty lives he would gladly lay them down to help the poor. He would say in the words, not of a christian, but of a pagan—*Homo sum, humani nihil a me alienum puto* (applause). He should be sorry to deprive the friends and relations of the good priest described by Dr. Cruise of the mournful consolation that he died as a good clergyman should, with his eyes open to the danger he incurred, and in the brave discharge of his duty. He was free to confess that the production of the map now before them was due to the suggestion of his friend Sir D. Corrigan. On the former occasion, to which allusion had been made, he was greatly struck with Sir Dominic's cholera map; it seemed to him a most valuable contribution to the cholera epidemic in 1849; it contained a valuable record of the towns that were attacked by cholera and that escaped it, but it was not accompanied with any explanation as to how a certain set of towns acquired the cholera, and how another set of towns was exempted from it. In the pamphlet which accompanied the map Sir Dominic Corrigan threw out a suggestion as to the reason why the eastern towns were exempted from the disease, while the western towns were subject to it. This was a mere guess, and as he (Professor Haughton) was equally entitled to make a guess, he ventured upon one, and the unfortunate reapers came into his head. He wanted to supply, if possible, a clue to Sir Dominic Corrigan's map. He presumed now from what they had heard that evening, that the poor reapers were blamed unjustly, and that they did not carry the cholera from England to Connaught. But he thought Sir Dominic Corrigan's map was no longer a puzzle. He ventured to say that the map he had constructed of the cholera epidemic of 1866, gave the key to the older map of 1849, which would prove of the greatest possible value to medical science. He started with a general feeling in favour of the contact theory, but with a determination not to allow himself to be influenced by that view in opposition to facts. The result of his inquiries had been the map before them, and he had evidence to show that nearly every town which was marked in black as having been visited with cholera, had derived it either directly or indirectly from the town of Liverpool, and there were only a few towns on the map—Parsonstown for example, which derived it from Sheffield and Westport, to which the contagion was carried by sea from South Wales—which were not indebted to Liverpool for the disease. Cholera entered Ireland at four points by sea; Belfast, Dundalk, Drogheda, and Dublin. Dr. Head had stated the remarkable circumstances connected with the outbreak of the disease in the little village of Killoughter in the North. Other towns derived the cholera from Dublin, which was a secondary or indirect importation from Liverpool. He had marked the lines of railway along which the epidemic travelled, and had divided the towns into groups according to the time at which they were attacked. Thus, Dublin was No. 1, Belfast 2, and so on. The disease did not travel in a direct line, as it would if it were conveyed by the atmosphere, but jumped from place to place as it would if conveyed by personal influence. The reason why Mallow suffered before Newbridge, was that the cholera patient who brought the disease to Mallow, took a ticket for Mallow and not for Newbridge. If he stopped at Mountmellick he would have brought the disease there, or if he went to Kilcock he might have introduced it into that dirty village, and killed the Kilcockians (laughter). The comparative exemption of Ulster, and the apparently sporadic spread of the disease into the west of Ireland, were apparent on his map as well as in the map of 1849; the resemblance between the two maps was great, and the same facts were disclosed by both. He gave his friend Sir Dominic Corrigan credit for more than his usual skill in finding an explanation for the facts. The reason why Sir Dominic thought Ulster was exempted

from the disease was, because the people of Ulster are more prosperous, more active in their commercial enterprize, and therefore must be supposed to have more intercourse with each other than the people of other parts of Ireland. Every one who knew intimately the self-reliant people of Ulster knew that the contrary was the fact. Ulster consisted of a series of isolated centres of enterprize. Each man in that centre considered himself superior to every one in any other part of the earth; he held little intercourse with others, and as to the *Times* he did not believe in it, and it was to be wished that other people in Ireland would follow his example in this respect (laughter). Places like Enniskillen, Strabane, Dungannon, and Omagh were, as he had said, isolated centres of industry; they had little or no intercourse with Liverpool, they did not go there, they did not care about it, and therefore the same broad fact appeared on his map which was exhibited by the map of Sir Dominic Corrigan—the exemption of these local centres of industry in the North from the disease. As to the spread of the disease into the West, he had got information with respect to its importation into Westport, Ballinasloe, and Kilrush. Dr. Croker King gave him the names of the persons who brought it to those places. In fact, all those cases which would otherwise be regarded as due to sporadic or epidemic influence were explained the moment they obtained the history of the individual cases. He thought this discussion, which had the result of showing that there was less difference of opinion between them than when they commenced, could lead to no more interesting or important result than a demand upon the poor-law authorities to inform them in detail of the opinion of the Medical Officers employed under them in each town and district, as to how and when the cholera was introduced into their respective districts. Cholera and the introduction of cholera, like every other matter of science, must be subject to the rules of severe logic, and as several of the observations made that evening exhibited very lax views on this important subject, perhaps they would allow him to state what he believed to be the correct view of the contact theory of cholera. The contact theory of cholera was based on two hypotheses. The first was one they were all familiar with, there must be, *ab extra*, a materies morbi. For the second term he would propose a new form of expression. Receptivity was bog latin, but he had found an expression in the works of the elder Pliny, who lost his life, in the pursuit of science, at the destruction of Herculaneum, which he thought would be appropriate. Pliny, speaking of a friend, described him as capax secreti—one who could hold a secret if you put it into him, and he carefully excluded his wife from that category (laughter). Now he would propose the term capax morbi, which means the capacity of receiving the disease, and the capability of holding it when you got it, as the second hypothesis on which the contact theory depended. If they accepted those two hypotheses, they easily disposed of two classes of fallacies—fallacies of which he believed he had heard a great deal that night. First, the occurrence of cases in which persons were in contact with cholera who did not take the disease. He envied them their luck, they must be very tough and have magnificent constitutions, and their friend, the army surgeon, who had described his views on the subject so clearly might be perfectly certain that he was not capable of taking the disease, while more delicate persons were. The secretions of the skin in tropical climates might also have some influence in preventing contact being so dangerous in India as it would be in a colder climate. The second class of cases were those in which genuine cholera occurred in persons who were not in contact with the disease. This was illustrated by the outbreak in Mountjoy Prison, but he was sure his friend Dr. M'Donnell would not press that beyond its legitimate consequence, which was to show how difficult it was to ascertain exactly the origin of the disease in every case. Here they must confess their ignorance, but he would not confess ignorance in general. The contact theory, he submitted, was much more probable than any other that had been advanced. But on two points they were ignorant—they were ignorant of the precise nature of the materies morbi, and of the precise quality of body that constituted the capacitas morbi in the subject. He trusted one important result of their debate would be that in future they would direct their attention in a more precise manner to trace the particular channel by which the disease entered the body, and the particular condition of malaise or ill health, which rendered an individual susceptible of it (applause).

Dr. White said, as one of the medical officers practising in a district in which a great deal of cholera appeared last autumn, he wished to say a few words on the subject. The first case of cholera which occurred at that side of the county of Dublin came under his notice. It was that of a lady whom he attended in her confinement, and he could not say from what he had heard that evening but that he had himself been the means of communicating the disease. He was attending at the Meath Hospital, watching the progress of cholera, the very day on the night of which he was called on to attend this lady. On the fifth day after her confinement she was attacked with cholera, passed through the disease and recovered; on the sixth day of her illness the nurse-tender was attacked at half-past two in the morning, having gone to bed well on the previous night. This woman died. The other attendants in the house were very careful as to cleanliness. As to the nurse there was probably the *capacity* in her system, for the woman was a drunkard, and had been indulging largely in spirits when in attendance on the lady. The next case which came under his observation was that of a gentleman who lived in a large, well-situated country house; he had been in Dublin during the day. He was attacked with cholera at night, passed through the disease well, and immediately on his convalescence, his wife, who had been in close attendance on him, was also attacked with cholera. On the third occasion, he was called in to see a servant in one of the best houses in Rathgar. There was nothing to account for her illness that he could find out, except the one fact, that she had been at a party at Donnybrook, where cholera was prevalent, and the night following she was in cholera. An infant was in bed with her when the first indications of disease appeared. A few hours after being removed, the infant presented all the symptoms of Asiatic cholera, passed through it, and recovered. The woman died. With respect to the immunity of the police from the disease, he should say that, in his district, the police did not come into contact with the cholera patients, for they performed no sanitary duties. Two policemen in Crumlin were attacked, and attended by Dr. Davy. The first man recovered; the second, who slept in the same barrack-room, and was in attendance on his comrade, received the disease, and, he regretted to say, succumbed. There was another man who acted as nurse-tender, he never showed the least sign of illness.

Dr. Charles F. Moore said—As no other City District Medical Officer had addressed the Society, he was desirous of mentioning the course cholera appeared to take in No. 3 Dispensary District. 190 cases of cholera, and considerably more than 1000 of diarrhœa, came under the notice of the medical staff of that district. The first case of cholera was that of a labourer, who worked near the quays, where the cholera first appeared in this epidemic, but who resided in Bride-street; subsequent cases occurred in over-crowded and otherwise unwholesome cellars and other tenements. One of the worst outbreaks took place in a house inhabited by the lowest class of prostitutes, and spread thence to the adjoining houses, which, after much trouble, the medical officer succeeded in getting closed. From three or four centres the epidemic radiated to the other parts of the district. In 1854 he was one of the physicians of the Finglas Cholera Hospital; the epidemic, on that occasion, commenced in a man just arrived from Belfast, who, after eating to excess and drinking much porter, was seized with the disease; he recovered; but a girl, living in the same very unwholesome house as this man, took the disease, and died of it, and at her wake several persons sickened, and thus the disease rapidly spread through the village, and

many persons fleeing thence carried cholera to Kill of the Grange, the North Dublin Union Workhouse, and in other directions. His (Dr. Moore's) previous experience in Southampton, Egypt, the Mediterranean, &c., also had led him to consider that the disease spreads from person to person. The last Army Medical Report, that published in 1866, contained much evidence to show that the disease was communicated from those already sick, or in contact with the sick, to the healthy; the very striking instance of the last epidemic in Gozo afforded evidence on this point. That island was remarkably secluded; the disease spread from a sailor who returned to his native island from Malta with the cholera upon him—first, to his own family and friends who had nursed him in the disease, and by those persons the illness was carried to the hospital in Rabbato, the chief town of the island, whence it spread to the general population. Dr. Gordon's work on "Hygiene," published in Calcutta in 1866, recognised the spreading of cholera by contagion in numerous instances where pilgrims passed near bodies of troops, &c. He would only add, in conclusion, that the experience of the past as well as of previous epidemics in Malta, and what he himself had observed at home and abroad, led him to believe that human intercourse was the chief element in the spread of the disease.

Dr. Laing, Staff Surgeon-Major, said—A gentleman remarked on the previous night that he never heard of the epidemic influence of cholera travelling faster than man could do, but he (Dr. Laing) did not think it could travel nearly as fast. Any one who ever observed in the country the smoke from a fire, must have seen how every little inequality, every bush and tree stopped it, and prevented it from travelling quickly; and he was of opinion that rivers were quick channels for the conveyance of epidemic influences—not from their having "traffic" on them, and being, therefore, a means of human progress—but because the smooth surface of the river offered less impediment to the travelling of the epidemic influence along it. He was frequently in the swamps of America, and observed that the people who lived on hard ground in the middle of these swamps were perfectly free from attacks of intermittent fever, whereas those on the border portions of the clearing, where the original forests remained, were subject to severe and prolonged attacks of intermittent fever, showing the appearance of it in their countenance, and in an enlargement of the spleen. He was in Prescott, on the banks of the St. Lawrence, when cholera came to Quebec—how or when he could not say. It came, he believed, when the emigrants landed at Quebec, and they heard of it appearing at various towns on the St. Lawrence. Every morning he went down to the wharf where the steamers touched, to hear anything about it that was to be learned. A poor German emigrant woman who had the disease was landed at the wharf. She was put into a shed, and the most effectual quarantine surrounded her, for no one went near her but her husband and himself (Dr. Laing), and he fed her and brought her the food with his own hands. The disease broke out in Prescott, and spread round the town. In one place there was a small two-storied house of wood. It was surrounded by poplar trees, standing so closely and thickly together that they prevented the light getting into the windows. This house was exposed to a breeze coming across part of a river which had been embanked for the purposes of the railway. The breeze blew directly on the house, and in that house he attended eight cases of cholera, all of which died. He attributed this to the cholera malaria coming up and across the river, and being collected and kept round the house by the trees. He thought this showed that in most cases sanitary reform was the great thing to be attended to. He might observe in reference to a statement which had been made by one of the speakers that evening, that he had lived a good deal of his life in India, and had been attached to English and Irish regiments, and he never yet saw a British soldier refuse to attend his comrade in sickness. If he held up his hand he would have a hundred volunteers for the duty. If the Medical Officer who said he found reluctance on the part of the soldiers to attend their comrades belonged to the regiment, he and other officers must have shown a bad example. It was the officers who were really answerable for the conduct of the men.

The President said it now became his duty, as their chairman, to make a short summary of the proceedings of the last three nights. In the first instance, they had reports from the various Dublin Hospitals that had opened their doors to receive cholera patients—the Meath, Hardwicke, Sir Patrick Dun's, and the Mater Misericordiæ Hospital, and also one from the Mountjoy Prison. In addition to these they had a most valuable abstract of a report of a recent epidemic at Utrecht, which they owed to the kindness of Dr. William Daniel Moore, and they had a report from the Bray Hospital by Dr. Darby. Now the debate of the two last nights could hardly be considered to have been on those reports. It took a wider range, and he thought none of them could regret it, inasmuch as it had brought out a great store of interesting information from the army medical officers, for which they all felt deeply indebted. The results of the reports might be considered in a three-fold point of view. First, as to what additions the experience of the late epidemic had made with reference to the pathology of the disease. Next as to its treatment; and, third, the question of its communicability or its mode of outbreak. Several dissections of cholera patients were recorded. Dissections had been made at the Meath, Hardwicke, Mater Misericordiæ, and Sir Patrick Dun's Hospitals. Nothing of importance had been realized, and this was what they should expect; for cholera, which, as they would all admit, was in the category of essential diseases, was not an affection that would shew appreciable anatomical changes. Anatomy told them what it was not, not what it was; its information was negative, and there was one reason for this besides others—namely, the short course which the disease runs, so that there is not even time for the formation of those secondary organic affections which so commonly arise in essential diseases. Certain changes had been found, but they were quite incompetent to explain the nature of the disease, they were inconstant and unnecessary. The blood had been found thick and tarry, and the rigor mortis well marked. The rise of the temperature after death was a very curious circumstance that had been recorded in the Hardwicke and in the Mater Misericordiæ Hospitals. In this respect there was a curious analogy between cholera and sunstroke; the rise of temperature in the latter had been recorded by many military officers; it might rise three degrees beyond what it was at the time of death. He might be excused for alluding to another analogy, which would go for as much as it was worth. Last year, in the *Dublin Quarterly Journal*, there was a paper on sunstroke by a pupil of his own, Dr. Baxter, and he held that there was a very great analogy indeed between many of the phenomena of sunstroke and the phenomena of malignant or spasmodic cholera. Another remarkable fact had been observed—viz., that the extreme lividity of the body before death disappeared very much after death. Something very similar had been observed in cases of the disease called by some, "Purpura Maligna," and the "Black Death," where the large petechial or ecchymosed spots, almost black at the time of death, became red on exposure to the air. The right chamber of the heart was found full of blood, and a coagulum was formed in the pulmonary artery. Dr. Kennedy had alluded to puerile respiration arising from weakness of the heart as a symptom threatening death. This was very important, it showed a great analogy to other cases of weakness of the heart, for one of the most remarkable signs of fatty degeneration of the right side of the heart was the existence of loud puerile respiration, either constant or occuring in fits. The brain had been found generally healthy, and the spinal-marrow also. There was nothing else remarkable but a washed appearance of the intestines, and, in some instances, the bursting of Peyer's and Brunner's glands. The next thing to be observed was cadaveric twitchings. This was an extraordinary phenomenon. He

was acquainted some years ago with Staff-Surgeon Marshall, an old Indian officer, who stated that in the early outbreak of cholera they were all anxious to determine the nature of the disease by post-mortem examinations; but he found it difficult to go on with the dissection, for the moment the incision was made in the sternum the body would spring up with frightful gestures, as if galvanized, and it was very hard, he said, "to make the young hands go on." As to treatment no cure had been discovered for cholera, and no cure, no specific was sought for. In this respect cholera was not peculiar. There was no cure for any essential disease. No man could venture to say that this or that treatment will cure an essential fever. The physician guides it to recovery. He knows the system is exposed to two dangers—debility and secondary disease, and steering between these two rocks, he guides it until the time when the clock strikes and the disease ends of itself, either in death or recovery. So it was with cholera. In the reports from some of the Hospitals, there were columns apparently recording the results of special treatment, and this was objectionable, for it led to misconception as to the practice of the Hospital. They read of so many cases treated by calomel, so many by white of eggs, so many by stimulants, and so forth. The objection to such a column as this was, that it might lead the public or medical men at a distance to the erroneous impression that in the Dublin Hospitals there had been any cases treated by this thing or that thing alone. The great characteristic of Irish medicine, as Sir Dominic Corrigan had said, was its eclecticism; and when they inquired into the treatment of cholera patients, they found that it had been decidedly eclectic, and no one mode of treatment had been adopted in any number of cases. But with respect to palliative treatment something might be said. It had been found in some of our Hospitals that an admirable method of relieving painful spasms was by the inhalation of chloroform. This might be done with perfect safety, and repeated again and again—not to such a degree as to produce insensibility, but to act as an anæsthetic and procure the patient relief. So, also, they found in the Meath Hospital great value, in the collapse, from Sir D. Corrigan's button cautery along the spine. In cases of suppression of urine, even when uræmic symptoms had appeared with complete suppression for forty-eight hours, cupping repeated again and again, drawing a few ounces of blood, had restored the secretion of urine, and been attended with success. The treatment by saline injections had been tried by him, and with the usual result of apparent and almost instantaneous relief, but in the course of a few hours purging came on again, and the case was as bad as ever. In the Mater Misericordiæ and the Meath Hospitals the treatment by calomel was tried, and with some fortunate results. It was found that when bilious stools were produced, the patient's chances of recovery were greatly increased. Now, as regards the question of contagion, Dr. Kennedy spoke of negative evidence, by which he meant the general opinion among gentlemen who practised in India, against the doctrine of contagion. It would be quite wrong to shut their ears to the evidence of these gentlemen. It was extremely important, however, on the other hand, that they should remember they were not to infer the phenomena of disease in one part of the world from those in another. The question of contagion in the North—in European countries—had some elements of difference from the question of contagion in tropical climates. The principal mortality in India occurred among the natives, and here we got another element—the comparative mortality of the disease in coloured men and in white men. It might be that the natives of the tropical climates and the coloured races generally were more liable to the exciting causes of cholera than the whites. He thought that extremely probable, and it also might be that contagion was apt to be more rife in the colder than in the warmer climates. It might be said, also, that the European constitution was less liable to contagion in India than in a more northern climate. So far as he could collect from Dr. Mackesy, who had had great experience, that was his opinion. Dr Lyons, who advocated the non-contagion theory, had dwelt on the fact of the immunity of a large proportion of the staff of the Hardwicke Hospital. A similar circumstance was observed in the Mater Misericordiæ Hospital, where there was a large staff of Physicans, and of Sisters of Mercy and hospital nurses, in constant attendance on patients, and yet there was not a single case of contagion. This showed, in a striking manner, that the disease during the late epidemic was not eminently contagious. But when they recollected the epidemic of 1849, and recalled to mind the terrible mortality among medical officers who were sent down to the country—five medical men, for instance, having been struck down in Sligo—they had a set-off against the immunity of Dublin during the late epidemic. The outbreak in Mountjoy prison might be set against the contagion theory, and seemed to point to the spontaneous origin of cholera. But it was to be remembered that at the time of this outbreak there was a general epidemic prevalent, and they had to balance the chances of some communication from without, with those of the spontaneous generation of the disease within. It was remarkable that, coincident with the outbreak of malignant cholera in the Prison, there was a great number of cases of choleraic diarrhœa, and this furnished them with arguments for the philosophic view put forward by Dr. Darby—that when there was an epidemic of cholera, all those cases of diarrhœa which were apt to run into cholera must be considered a species of cholera of a mild form. If this be so, and he had no doubt of it, it would greatly diminish the percentage of mortality, which, in place of being 50, would be only 20 or 30 per cent. The proofs of contagion in any epidemic mainly depend on a balance of probabilities, and the application of the doctrine of chances might be well made to clear up the matter. This was done in reference to fever by the late Dr. Whitley Stokes, who proposed certain problems to the Bishop of Cloyne, who was well skilled in the calculation of chances, as to the probabilities for and against the occurrence of ascertained events, assuming that the illness of one person did not promote that of another. The Society will find the results in Dr. Stokes' observations on Contagion. This mode of proceeding was eminently deserving of the attention of the Society. Dr. Stokes concluded by congratulating the Society on the three meetings, and thought that great good would come of the discussion which had taken place.

On the motion of Sir D. Corrigan, seconded by Rev. Professor Haughton, a vote of thanks was passed to the Military Medical Officers, for the information which they had given to the meeting.

The meeting then separated.

HARVEIAN SOCIETY OF LONDON.

March 21st.

President—Dr. J. E. Pollock.

Mr. Isaac Brown read a paper on

anæsthetics in midwifery.

Commencing by paying a tribute of praise to Sir James Simpson, and all those who, through much labour, opposition and obloquy, had succeeded in bringing the induction of anæsthesia to perfection, Mr. Brown felt that we were bound to relieve, by the same means, that pain of which, as practitioners of medicine, we all so constantly witness—the great pain and travail of labour. He reviewed the principal objections, scriptural and professional, which had been raised against administering anæsthetics in midwifery, and showed how completely they had been answered by Sir James Simpson, and also by Dr. Protheroe Smith. Although one seldom now hears, in their former intensity, any of the original unwarrantable objections, there are not wanting, says Mr. Brown, some who do object to chloroform or any other anæsthetic in midwifery, on the ground that by such means the strength of the uterine contractions is impaired, and that there is not sufficient risk to life, arising from the pains of labour, to justify us in adminis-

tering for their relief an agent, itself capable of risking life. The first objection he hoped to prove untenable, by relating cases which would show labour to be rather hastened than impaired by anæsthetics, and to the second he would give the best answer, by bringing under notice an anæsthetic agent, which is, under ordinary circumstances, incapable of producing total unconsciousness, and so reducing the risk of loss of life from its influence to almost nil.

Ether, the first anæsthetic introduced to the profession, Mr. Brown considered entirely unsuited for midwifery purposes, from the large quantity required, and consequently its expense and unportability, and also on account of its disagreeable odour.

Chloroform, *pur et simple*, he also objected to as liable to be given to the induction of full narcosis, although he admitted, with Dr. Rigby, that "in *almost* all private patients you can draw the line between loss of pain and loss of consciousness." It is this word "*almost*" that makes a dilution of chloroform necessary, for the practitioner ought not, in administering an anæsthetic to a parturient patient, use an agent which compels him to give a divided attention to that office for which he is especially called—viz., aiding the birth of the child.

Mr. Brown objected to the mixtures recommended by the Chloroform Committee of the Medico-Chirurgical Society, on the ground of the ether that they contained, and quoted largely from Dr. Samson (without doubt next to Dr. Snow, the English physician, to whom we owe most for really valuable investigations on the subject) to show that in alcohol alone we have an agent on which we can fully rely as a diluent of chloloroform, and he also used the same gentleman's arguments, and repeated the objections which he had himself made in answer to Mr. Ellis' ingenious but exceedingly complicated and unnecessary method of inducing anæsthesia by mixed vapours. With reference to Dr. Townley's "anodyne mixture," Mr. Brown had been compelled, as had also friends of his, to abandon it as he did not find it, when made up by others than Dr. Townley's own chemist, so efficacious as from his book one was led to hope.

Moreover, the aromatic tincture added by Dr. Townley, had, as it evaporated, a most disagreeable and drug-like smell.

Mr. Brown, in March, 1865, had made some experiments with dilutions of chloroform with alcohol, and had found that the most convenient for use in midwifery was two parts of chloroform with one of alcohol. In the latter was distilled the essential oils used in the preparation of eau-de-cologne. The mixture was clear, and as it evaporated, very elegant and agreeable to the patient. If properly prepared it should have a specific gravity of 1·152. It must not be confounded with a mixture of chloroform and ordinary eau-de-cologne, in which there being water, the chloroform is at once precipitated. Mr. Brown did not consider there was any particular merit in the eau-de-cologne besides its agreeable odour, but suggested it might help as a gentle stimulant, in combination with the alcoholic dilution, to prevent the patient from being fully narcotized.

This mixture to which he had given the name of chlorætherine, it being, as it were, a concentrated chloric ether, had been exhibited at the Obstetrical Society, October, 1865, and had since been used largely by him in his own practice, and also by many others. He did not himself use inhalers, but they who did could administer his mixture in them as well as chloroform. For all practical purposes he considered that for a dilution of chloroform, a napkin, folded cone-shape, was most convenient. There were no particular directions with reference to its administration. It should not be given until the os is well dilated, except in cases of rigidity of the os, when a few inhalations will speedily produce relaxation; nor should it be given after the child is born, although patients may often ask for it, so severe do they find the pains accompanying the birth of the placenta, after having been delivered of the child without pain.

Mr. Brown concluded by relating cases which had occurred in his own practice, and two in which he had administered it for Mr. Philip Harper, and for Dr. Abud. He also read letters from Dr. Sansom, and from Mr. Roberts, Honorary Surgeon to the Hull Lying-in Infirmary, supporting him in his belief that in chlorætherine we have as simple, efficacious, safe, and agreeable a method of relieving "the pleasing punishment which woman is born to bear" as is yet known to the profession.

Dr. Chapman thought that the first action of chloroform was on the capillaries, and not as generally supposed, on the heart. Dr. Snow thought death ensued from paralysis of the heart; but it must be remembered that the great force moving the heart resided in the capillaries. Deaths are brought on, he believed, by congestion of the portal system. He performed some experiments by chloroforming animals, and afterwards dividing the portal vessels; although the heart had ceased to beat it resumed its pulsation when the portal vessels were divided and the right side of the heart emptied.

Dr. C. Drysdale had in former years, when assistant-obstetrican in a hospital, been in the habit of administering chloroform in all cases of midwifery. He thought that when only administered to allay the pain in healthy persons, and with plenty of air, as when Skinner's web was used, there was no danger, and he thought it was rather a want of humanity to allow so much suffering as usually took place in parturition, without using so simple a remedy.

Mr. Curgenven said that chloroform was rarely used in obstetric practice in London, he seldom used it himself. In 1851 he had given it to a lady; but she became blue in the face, and this had given him a dislike to it.

Dr. Holt Dunn said that the danger in administering chloroform in midwifery was very slight; but still it existed. He had never seen any bad consequences from administering it in such cases, and it was remarkable that there was not the sickness observed in such cases which was seen in operative cases.

Dr. Royston said he had been long averse to chloroform in midwifery, and had very rarely used it.

Mr. Owen said that in many cases it had seemed to him that the air did not pass well through the aperture in the cone recommended by Mr. Brown. Dr. Lockock's opinion had been, that the simplest method of administering chloroform to women in labour was to put ℥i. in the bottom of a tumbler on some cotton-wool and let it be smelt.

Mr. Walker said that this was a capital suggestion. Skinner's web, referred to by Dr. Drysdale, was as good and as safe an apparatus as could be devised, and the nurse could be quite well trusted to drop a few minims occasionally on the web without any danger of doing harm. Women in labour took chloroform very well.

Dr. Camps thought that the giving of chloroform was always attended with a certain amount of danger. Deaths occasionally would take place, spite of every precaution. He believed the immediate cause was often paralysis of the pneumogastric nerves.

Mr. Parker Young asked Mr. B. Brown whether his mixture was as rapid a relief from pain as chloroform was. He had found, on using chloroform in labour, that a very considerable quantity of it was required to produce anæsthesia in a long labour, and it was therefore very expensive.

Mr. Isaac Brown said that he had on no occasion required to use more than one fluid ounce of his mixture in one case.

THE PULSE.

A lecture, supplementary to the ordinary courses, of which we have already published abstracts, was this year delivered at the London College of Physicians, by Dr. Burdon-Sanderson, who has paid much attention to the sphygmograph, and which illustrated in various ways the use of that instrument. The lecture was entitled "On the Mode and Duration of the Contraction of the Heart in Health

and Disease," and its chief object was to show the relations of the cardiac movements to the pulse. It was illustrated by a number of tracings from the sphygmograph *on glass*, illuminated by the oxycalcium light.

Dr. Sanderson considered that every pulsation is composed, so to speak, of four separate actions, viz. :—*(a.)* The sudden or primary *expansion of the artery.* This, he believes, does not arise from an increase of the quantity of blood in the artery, but rather from the sudden shock resulting from the forcing forwards of the particles of the liquid by those behind them. *(b.)* Gradual *distension of the artery.* The degree of fullness and the time required to effect it depend on the quantity of blood transmitted to the artery by the contraction of the ventricle. *(c.) Collapse of the arterial wall.* This the lecturer considered to depend on the impulse of the particles of the liquid in the arteries towards the heart, and the effect, therefore, is due to the velocity of the movement rather than to the extent. *(d.) Diastolic expansion* of the artery. This is the second beat which, when preternaturally distinct, is called *dicrotism.* This phenomenon, which has given rise to much conjecture, is considered by Dr. Sanderson to depend on the distension of the arterial walls, aided by the pressure of the blood, both these being produced by the forcing of the blood into the artery during the heart's systole. The distension he considered to bear a *direct* proportion to the elasticity of the artery, while the ratio of the pressure against the internal surface would be in an *inverse* proportion. Thus, the more elactic the artery the greater the increase in the area of the pulse and the less the increase of the pressure. So, according to the predominance of one or other state, the collapse of the artery after the systole is complete, no reaction being detected; or, in the opposite case, there is dicrotism. The normal state is the balance of the one by the other, and in health, so far as the artery is concerned, the heart employs only part of its force in carrying on the circulation during the systole, the remainder being required to keep up the blood-flow during the heart's repose.

According to this idea the varieties of the pulse in disease may be arranged in two classes :

I. Those in which the tension during systole being diminished, there is less resistance, and the duration of the systole is shorter than otherwise. This may arise from less blood being driven forwards at each stroke, as in valvular disease; or from the heart contracting too soon, as from the effect of stimulants. This constitutes the nervous pulse.

II. Pulses in which the pressure during the systole is too great, and in which there is increased arterial resistance. Of these there are three varieties, viz.—1. The hypendynamic pulse, in which the arterial system is over-distended during the heart's contraction. This may arise from structural changes in the arteries or the capillaries producing increased resistance. 2. The senile pulse. This differs from the other in the absence of diastolic reaction. It is the pulse of an artery that has lost its natural elasticity.

III. The adynamic pulse, well seen in continued fever. In this pulse the result arises from the weakness of the heart rather than from the extent of the resistance. The elasticity of the arteries is excessive, partly from their being unusually empty. The consequence of this is that the reaction is much more sensible, and in a well-marked case we get the distinct double beat of *dicrotism.*

Of these varieties of the pulse, the lecturer seemed to attach much, the most, importance to the first. He submitted that it offers us the earliest indications of structural changes in the arteries and capillaries, and consequently bears directly on the expectation of life, as well as on prognosis.

The lecture was listened to with great attention, and much interest was expressed in the sphygmographic tracings, and the mode of illuminating them. It furnished a very worthy supplement to the Gulstonian, Croonian, and Lumleian Lectures; and concluded a lecture season at the College in which a more than ordinary interest seems to have been taken, and which we have therefore reported as fully as possible.

Reviews.

THE SANITARY ACT, 1886, with Notes, Statutes, &c. By R. C. Austin, Barrister; together with Commentaries on Public Health and the Sanitary Laws of England, by W. Hardwicke, M.D., &c. London: Nicholls.

The combination of a legal and a medical authority in the production of this work would naturally lead us to form a high opinion of it, and, after a careful perusal, we have been in no way disappointed. The publication deserved, and would have received, notice in our columns long since, save for the indisposition of the reviewer to whom it was entrusted. Now that a reconstruction and consolidation of the Sanitary Acts has been promised by the Duke of Marlborough, the President of Council, and the Vice-President, Lord Robert Montague, who for so many years has interested himself in sanitary legislation, the publication is most seasonable and useful. The clauses of the various sanitary acts are very conveniently arranged, so that a fair basis for their codification is established. In the latter part of the work, such subjects as medical officers of health, water supply, drainage, cemeteries, overcrowding, noxious trades, &c., are ably treated by the author, and further illustrated by extracts from the reports of Simon, Lankester, Letheby, Mapother, French, and other writers on hygiene. On the whole the work is well-arranged and reliable, and will be most useful to every one engaged in the administration of the Sanitary Act of last year.

QUAIN'S ELEMENTS OF ANATOMY. Seventh Edition. By W. Sharpey, M.D., F.R.S.; A. Thomson, M.D., F.R.S.; and J. Clelland, M.D. Pp. 1147. London: J. Walton.

This standard work is so generally known and so highly prized, that it is only necessary for us to record the additions and improvements which have been made in this the seventh edition. It is as regards the illustrations that the most extensive changes have taken place, for they now reach eight hundred, and most of them are new, and on a larger scale than in former editions. The section on general anatomy is marked by great fullness and accuracy, as well as by containing an account of the most recent observations by both British and foreign histologists. This might be expected when it is announced that Prof. Sharpey is responsible for this department. The main portion of the work is arranged according to the systematic plan, but the disadvantages to the student of practical anatomy which would thereby ensue, are removed by the addition of sections on surgical anatomy, and on the management of dissections. The former, however, merely discusses the anatomy of the parts concerned in the ligatures of the arteries, and a few other surgical operations—the abnormal positions of the bones and the actions of muscles in fractures and dislocations, as well as some other subjects often embraced in special treatises on surgical anatomy, not being included. An index, so copious as to occupy sixty-two closely printed pages, concludes the second volume; and it is made especially valuable by the fact, that the derivations of all the technical terms are given. Quain's "Anatomy" is indispensable to the teacher of the science, and is just the book with which to reward the industrious or prize-taking student.

ON DISEASE OF THE STOMACH: the Varieties of Dyspepsia, their Diagnosis and Treatment. By S. O. Habershon, M.D. London: Hardwicke.

Ten years ago Dr. Habershon published a larger volume than this, entitled, "Pathological and Practical Observations on Diseases of the Abdomen." That work was well received, but the author informs us that he has been advised that a smaller book, consisting chiefly of his own experience, and without the pathology, would be acceptable to the practitioner. Hence, the present production which is in effect a summary of the author's experience in hospital and private practice. The work opens with a chapter on the changes of digestion at different periods of life. Then follow more practical notes on the general sympathy of the stomach in disease; on the symptoms and general treatment of diseases of the stomach; and on remedies for indigestion and their abuse.

Dr. Habershon next proceeds to the varieties of dyspepsia, which he classifies as atonic, congestive, inflammatory, hepatic, rheumatic, gouty, renal, mechanical, sympathetic, fermentative, and duodenal. Chapters on degeneration, ulcera-

tion, and cancerous disease of the stomach complete this elegant little volume. It is not to be expected that a book of this description should present much that is new or particularly striking to the experienced practitioner. It is rather a commendable feature that it should be confined to the elucidation of those practical points that come within the range of daily observation. We have read the work with considerable attention, and while prepared to admit that it is such as any hospital physician ought to be able to produce, are ready to add that the student and young practitioner will be the better for its perusal. So far as it enters into detail it is fully trust-worthy, and may be taken as a fair sample of the practice of a Guy's man. There is not the least pretensiousness in Dr. Habershon's teaching, nor is there any attempt at novelty in his book. Still less do we detect any effort to connect his name with new or peculiar remedies. In point of fact there is scarcely a prescription in the book which aims rather to inculcate the right application of principles than the use of favourite formulæ. In a second edition to which we look forward, we have no suggestions to offer the writer, unless a revision of the text, with a view to remove some marks of haste in the style, such as a little confusion resulting from the alternate use of the *I* and the *we*, which is not quite agreeable; and the correction of some errors in punctuation, which are unquestionably due to the printer's reader. After what we have said it would be superfluous to point out the chapters most worthy of attention. Each reader may select that which at the moment may appear to him most interesting.

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The Medical Press and Circular.

"SALUS POPULI SUPREMA LEX."

WEDNESDAY, APRIL 24, 1867.

INSANITY OR MURDER.

The case of Karl Anderson, a Swede, who was last week convicted of murder at the Central Criminal Court, cannot fail to give rise to considerable discussion. From the evidence, it is clear that he was possessed of a superstitious delusion of a remarkable kind. On the same ship on which he was engaged for the voyage was another sailor, who, though in fact a Mulatto, was generally believed to be a Russian Finn. Now, sailors—in every respect superstitious—appear to have a dread of Russian Finns; and this fear is the more prevalent amongst the Swedes. Anderson had several times on the voyage expressed a conviction that the vessel would never reach London unless the supposed Finn could be got rid of; he was looked upon as a "little soft" by the rest of the crew, and seems to have given various evidences of weak intellect. One day, while at the wheel, a heavy gale blowing, he said to one of the officers, "This work will never do; we shall never get to London. I must kill that Russian Finn, and I can easily run away when I get to London." Other indications of eccentricity, if not delusion, were observed and deposed to. This poor Swede, then—apparently urged thereto by a fearful superstition—took an opportunity one night, when on watch, to kill the poor Mulatto in his bed. There was no doubt about the murder, nor as to its perpetrator. Roused by the noise, witnesses saw him throw overboard the axe with which he had committed the crime, and seized him with the blood of the Mulatto wet upon him. Asked why he had done it, he replied—"To save all hands in the ship, and prevent her running on shore." The man has been tried, convicted, and condemned to death, but we can scarcely believe the sentence will be carried out without further enquiry. The defence was that the act resulted from a delusion, and with so much room for a difference of opinion on such a question, we must express our surprise at the absence of scientific evidence. The jury, in convicting the prisoner, evidently decided that the plea of delusion was not made out; but in so strange a case as this we must decline to accept their verdict as decisive. From the remarks of the judge, we are unable to make out whether the verdict commended itself to his mind; but, whether it did or not, we trust that a thorough investigation into Anderson's state of mind will be made by some independent persons who may be capable of forming an opinion on the subject. To send this ignorant Swede to the gallows without clearing up that part of the evidence which relates to his mental state, would shock the whole community. No motive for the dreadful deed was attempted to be shown, except that strange terror which possessed the man respecting Russian Finns—a feeling akin to that which, in days gone by, has condemned many a poor woman to death for witchcraft. In the present day, no doubt, such gross superstition even in a sailor and a Swede, giving rise to so tragic an occurrence, is calculated to surprise as well as grieve those who would scarcely have suspected its existence. But the event itself comes before us with all the circumstantial detail of a judicial proceeding, and demands the earnest attention of every well-wisher of the race. Who knows how many Karl Anderson's may still be among us, doing, as this one is shown to have done, their duties in an ordinary way, and never suspected of being more than "a little soft?" On the one hand, there is danger lest such an one should be hurried on by a similar "impression" to an equally fatal act; on the other, it may be that this deed will cause many a poor fellow of weakly intellect to be looked upon as dangerous. We question, indeed, whether the punishment of this Swede would be likely to deter others equally enslaved by

superstition and ignorance, and there would seem some indication that he himself knew the consequences of his act, but was not thereby prevented from consummating it, but that he was urged on by his seemingly irresistible impulse to run the risk of a felon's doom, rather than that of the indefinable evil he believed to hang over him. For all these reasons, we submit, that there is in this case sufficient *prima facie* evidence of a specific delusion which, over-mastering the sense of right and wrong, for a time, may have rendered the man morally and even legally irresponsible for his acts. We contend that this point has not been sufficiently cleared up, that the evidence adduced at the trial was insufficient, and consequently that the verdict is unsatisfactory. We therefore ask, not only that the sentence may be stayed, but that immediate measures may be taken to bring to bear on the state of the prisoner's mind, that scientific evidence, of which there seems to have been so strange a dearth when the jury returned the verdict of guilty. To hang ANDERSON without first clearing up the doubtful points, would give rise to the most painful fears throughout the country, lest a manaic had been put to death for an act of madness.

ROYAL COLLEGE OF PHYSICIANS, LONDON.

AT the comitia majora of this ancient College held last week, Sir. Thomas Watson bade farewell to office in an address worthy to rank with the other literary labours of the venerable Baronet. As we reported last week, there have been numerous expressions of a wish that Sir. Thomas might be induced to continue in the office he has so long filled with dignity. He felt however, the need for repose, and so firmly expressed this that no course was left but to proceed to the election of a new President. The chair has for the last five years been filled by Sir. Thomas Watson, and we need scarcely add, that the vote of thanks proposed by Dr. Burrows was carried unanimously, and with great applause.

The choice of a successor was then proceeded with. The ballot having been taken, it appeared that Dr. Alderson was elected, and he is now the President of the College.

Dr. Alderson has long been known as a physician at St. Mary's Hospital. He graduated in Arts at Cambridge in 1822, obtaining the position of sixth wrangler. He afterwards became Fellow of Pembroke College. In 1829 he took the degree of Doctor of Medicine at Oxford, and the following year became a Fellow of the College, over which he has now to preside. He has since occupied many honourable parts in his profession, and nearly exhausted the stock of distinctions. Thus, he has been treasurer of the College, and its representative on the General Medical Council of Education and Registration. He has been the President of the Royal Medical and Chirurgical Society, and has long enjoyed the coveted titular distinction of F.R.S. At the beginning of his career he practised at Hull, where he was Physician to the Infirmary. He has been connected with St. Mary's Hospital since its foundation. In 1853-4 he delievered the Lumleian Lectures at the College of Physicians. And he has contributed some papers to the societies and the journals. So much for the promise of a popular successor to Sir. Thomas Watson, who carries with him into his retirement the warm wishes not only of the Fellows of the College, but of the whole Profession. We append his farewell address, assured that it will prove interesting to our readers :—

"While I yet have the honour of being the President of this College—before I cease to be so, as in a few minutes, upon the election of my successor, I shall cease—I ask your permission to review, very briefly, as has hitherto been my custom, and for the last time, the events and proceedings of the College during the official year which this day brings to its close ; to note what we have been doing, to count our losses and gains, before the rush and hurry of modern life efface or render indistinct even the recent footprints of a single twelvemonth. I know not whether you will accept it as a justification, or as an apology, for this custom on my part, that it did not originate with me, but has simply been revived after long disuse. In the earlier annals of the College, which were kept in the Latin language—now, I am sorry to think, less cultivated and less used among us,—you will find it constantly recorded that the out-going President retired "brevi oratione habita." Such a retrospect as I propose to take ought not to be altogether uninteresting nor unsuggestive.

"Some of our incidental doings have assumed an annual character, and need not be dwelt upon, having become almost matters of course. Thus we have again been glad to house the Medical Council, and to give up our rooms for a day to the Medico-Psychological Association.

"There has been the customary interchange of complimentary messages and requests, shall I call them tasks, from her Majesty's government, and of gratuitous service on our part in return.

"The labours of the Leprosy Committee have been completed, and their results embodied in a comprehensive report of great interest and value.

"At the instance of the Privy Council we have drawn up rules for the guidance of the captains of merchant vessels, respecting the measures to be adopted in any sudden outbreak of cholera on board ship.

"I had hoped that the much-looked-for report on the Nomenclature of Disease might have been presented to the College during my presidency ; but it is not quite, though it is very nearly ready.

"It will be satisfactory to the College to know that a warrant has recently been issued in full conformity with the recommendations of the committee which was appointed last year—mainly at the instance of this College—to inquire into the pay and precedence of the medical officers of the army.

"The portraits which were lent by the College last year for the National Portrait Exhibition at Kensington have been duly and safely returned ; and other portraits, of a later period, have been lent for the forthcoming exhibition of the present year.

"The College has granted a contribution of £25 towards a statue recently erected at Boulogne in honour of our countryman, Dr. Edward Jenner.

"We have received many valuable presents : books as usual, in large numbers ; the portrait in marble of the late Dr. John Conolly, which will be presented to-day ; the portraits of the late Dr. Spurgin, from his widow, and of the late Dr. Gooch, from his daughter ; and some admirable drawings illustrative of the pathology of the cattle disease, from the Cattle-plague Commissioners.

"The statutory lectures have been delivered before the College—by Dr. Reginald Southey, Dr. Andrew Clark, and Dr. Russell Reynolds ; and they were all in my judgment, who heard them all, able, interesting and instructive discourses, and worthy of our body.

"Dr. Burdon-Sanderson has also, in a supplementary lecture, explained and illustrated some important points connected with the arterial pulse, and the mode and duration of the heart's contractions in health and disease ; and Dr. Anstie has yet one or two lectures to deliver on the same or on similar subjects.

"Our losses from death among the Fellows, during the past year, have been unusually heavy and grievous—not only from the number, but from the quality also of those who have died Of this there is significance enough in the mere fact that all of them were or had been physicians or assistant-physicians of hospitals in London. All too, with a single exception, were

graduates of one or the other of our old Universities of Oxford and Cambridge; a class which, I may be permitted, without offence I hope, to declare my individual regret, is becoming comparatively less and less numerous among us.

"Let me notice rapidly, and in outline, some of the characteristic features that distinguished these men—taking them in the order of their seniority in the College list: Seymour, Babington, Jeaffreson, Sutherland, Barlow, Brinton, Woodfall.

"Dr. Seymour was not much known, I think, except by the older Fellows of the College. Yet he was at one time, and for many years, in large repute and practice. He began as a physician in Florence, where he made many influential English friends, who were afterwards of great service to him in London. Broken health, and broken fortunes, obscured his latter days. He possessed in no common degree the enviable gift—whether it be of voice, look, manner, or I know not what—of securing at once the confidence of those who consulted him; a gift which has made the fortune of many a physician of much less talent and information than Dr. Seymour, and the want of which has hindered the progress and marred the prosperity of many of far greater attainments than his. Dr. Seymour wrote on several subjects; and, by a not very unusual, but to me a puzzling inconsistency, he wrote less well than he spoke. He was much consulted, and his judgment was deservedly esteemed, in cases of insanity. He held, indeed, for some time the office of Commissioner in Lunacy. He was one of the first who used opium freely in the treatment of that terrible form of disease.

"Dr. Benjamin Guy Babington was the worthy son of a most worthy sire, who was himself a Fellow of this College, and whose shrewd and benevolent features are faithfully and admirably expressed in the marble bust beside us. The son was originally a midshipman in the Royal Navy, and served, together with the present Lord Chancellor, in that capacity at Copenhagan. But he soon transferred himself to the civil service in India, where he passed much of his earlier adult life, and where he acquired an accurate grammatical knowledge of the Eastern languages. Though he came late into our profession, and was of a modest and unassuming character, he achieved considerable distinction as a physician in London. His name will live as the founder, and for many years in succession the president, of a society which has for its end the elucidation of one of the most interesting, important, and obscure subjects of medical inquiry—the sources, constitution, and laws of epidemic diseases. Among various other contributions to medical science, he gave to English literature an admirable translation of Hecker's "History of the Epidemics of the Middle Ages." He possessed great versatility of talent. Excelling in those things that require perfection of the senses—accuracy of eye, agility of limb, delicacy of touch—he was, in sportsman's phrase, a good shot, a skilful billiard player, and no mean modeller. Nor was the inventive readiness of his mind less marked than were his bodily facilities. To take one instance only: he could claim the credit of having been the first to devise, nearly forty-five years ago, a method for bringing the organ of the human voice within the ken of the human eye—of being the inventor of that ingenious instrument with which, in a greatly improved form, we have since become familiar, under the untunable name of laryngoscope.

"The valuable life of Dr. Jeaffreson was prematurely lost while he was engaged in actual conflict with disease, and in the conscientious discharge of his professional duty. He died of a fever, which he caught from one of his patients. His practice in the city and its neighbourhood became early both extensive and fertile. He was a successful physician in both the meanings of success. But expending the whole force of his mind in the practical business of his calling—for he wrote nothing, though an hospital physician he never lectured—he has unfortunately left the world no record of his accumulated and ripe experience; but he *has* left behind him, among all who knew him—among friends, companions, and patients alike—a widely-felt, well-founded, and abiding sense of profound esteem and affectionate regret. He was one of the most kind-hearted and popular men within our body. It was lately remarked to me by a distinguished Fellow of the College who had known them well that he had never heard either Dr. Babington or Dr. Jeaffreson say an unkind thing of any man.

"The last four years of Dr. Sutherland's life were passed in the gloom of hopeless disease. In that department of practice which he specially cultivated, and in which his name had hereditary weight and distinction, his mature experience, his discriminative skill, his wise discretion, and his honourable nature have been greatly missed by many a sorrowing family; for these are qualities which are peculiarly needful and precious where mental disease is present in its varying shapes of misery and terror, and they were conspicuous qualities in Dr. Sutherland. It is to be added to his great credit and praise, that twenty-five years ago he persuaded the governors of St. Luke's Hospital to revive the practice—for it was not altogether novel—of admitting a certain number of selected students to the wards of the hospital for the purposes of study and instruction. St. Luke's was the first hospital, in this country at least, where that wise and salutary privilege was granted. It was obtained by Dr. Battie about the middle of the last century; but it had long fallen into absolute disuse. For several years Dr. Sutherland gave gratuitous lectures there, illustrating them clinically by actual examples, upon the supremely interesting subject of insanity.

"Dr. Barlow was a quiet, undemonstrative, yet withal an able, full, and accomplished physician, of which, were there no other evidence, his well-known Manual of the Practice of Medicine would furnish ample proof. Pursuing the even tenour of a blameless, beneficial, and laborious life, displaying "the power of art without the show," Dr. Barlow's career presented—may I not say for his own sake, *happily* presented—no very prominent points upon which to hang even such hasty shreds of biography as alone I have time, or dare to presume, to attempt.

"I have spoken of the death of Dr. Jeaffreson as untimely; indeed I might with truth say the same of almost all of those whose departure from this world it is my melancholy duty to commemorate to-day. But most emphatically may that epithet be applied to the death of Dr. Brinton, who was taken away in the very prime of his life, when, having overcome many obstacles, he had just begun to taste that fruit of fame, with its attending rewards and privileges, for which he had earnestly wrought, and which he so eminently merited. I cannot claim him as one of my own pupils at King's College; I am too old, or rather he was too young, for that; but he was a most distinguished student in that school, and I may, perhaps, venture to say he was somewhat hardly used there. He graduated at the University of London. Dr. Brinton was endowed by nature with all the main elements of success: a clear and acute intellect, untiring and methodical industry, great tenacity of purpose, a remarkable facility in acquiring and in imparting knowledge, and very engaging manners. Among numerous contributions to the literature of our profession, his writings on the diseases of the alimentary canal are the most prominent and the most original. He was the first to teach the true pathology of fæcal vomiting, and to settle, for all time, the nice and anxious management of intestinal obstructions. His accomplishments were many and various, and he put into his very recreations the same spirit and energy as were manifest in his scientific pursuits. He was ready and expert with his pencil; a clever caricaturist I have been told, yet assuredly not an ill-natured one. An active and ardent explorer of Alpine scenery, he constructed, on a large scale, diagrams—by which I have myself profited—of some of the most remarkable and least frequented passes in the mountains of the Tyrol. He was, moreover, though this does not seem to have been so generally known, a poet. I have in my possession a translation by him of Bürger's "Lenore," which, as I have been assured by one of our Fellows thoroughly competent to judge on such matters, is, in reference to the original German, equal, if not superior, to the well-known version of the same poem by Sir Walter Scott.

"The last of the Fellows whose death we have to deplore is Dr. Woodfall, beneath whose unpretending and even shy outward demeanour lay hid a fund of good sense, intelligence, and high and honourable feeling; hidden, I mean, from the observation of those with whom he was not familiarly intimate, yet sure to be recognised and appreciated in the end by all with whom he came into closer contact. He was one of those men, to whom I have already adverted, who, through a lack of self-assertion, are not adequately estimated by their fellow-men. After some attempts to settle himself in London, he retired to Maidstone, where his worth became known, where his death is even now a recent sorrow, and where (I use and echo the words of one of his professional brethren who wrote to report to me his loss) he was widely esteemed 'as a kind and amiable gentleman and a good physician.'

"These were men whom the College, while it mourns them, must sorely miss. On the other hand, we are not left without solace and compensation. During this year of disaster in our ranks we have not failed to ingraft upon our stock fresh names,

which I need not rehearse—names of younger and vigorous workers, by whom, in due time, I feel confident the serious losses we have been lamenting will be amply repaired.

"Eleven new Fellows have been admitted: our whole number is therefore increased by four. Seven Members of the College have died within the year, and sixteen have been added to the list; making an increase of nine.

"It only remains that I should attempt to do that which I feel to be well-nigh impossible—to embody in any form of words that I can devise, the deep and inextinguishable sense of gratitude with which my mind is full, for that kindness and trust which have placed me, year by year, on five successive occasions, at the head of the College of Physicians; in other words at the head of the medical profession in this great country. According to my estimation, already more than once expressed, there is no nobler position in medicine, whether I look before me and around me, to the body of men from whom it comes—or backward to the splendid list of names of those who have preceded me in the presidential chair. Linacre, Caius, Glisson, Sir Wm. Browne, Pitcairn, Sir George Baker—these, to go no later, are but a few of the eminent men and sound scholars with whom it may well be deemed a proud distinction to have one's name in any way associated. But besides this great and repeated honour—the greater because so repeated—I have much else to thank you for. I have to acknowledge your indulgence towards the many shortcomings of which I am but too conscious. I have to express my thanks for your constant support and counsel in all difficulties, for your unvarying courtesy and deference, for the friendships which my official intercourse with you has formed or strengthened, and most especially for that recent signal and touching evidence of your approbation and esteem, shown by your wish to possess within these walls some pictorial remembrance of my unworthy person. Of this high and generous compliment, I will never, while life and reason remain to me, be otherwise than most gratefully, and I hope pardonably proud. Furthermore, I have to rejoice that the happy lustrum during which I have presided over your affairs has been harmonious and peaceful, disturbed by no unseemly quarrels or serious differences among us—stained by no scandal arising within our professional body, and productive, through your exertions and self-sacrifice, of something at least of benefit to the common weal. If I find anything to regret, it is that I have not taken larger advantage of the opportunities which you have confided to me of promoting the interests of the College, and of our useful and noble Profession. Still, I must cherish the hope that the College has suffered no abatement of its ancient dignity and renown through my occupation of the office which I now respectfully render back into your hands. And so, without encroaching further upon your time, and in redemption of the pledge which I gave you last year, I bid you, as your President, one and all, a cordial, affectionate, and final farewell."

REFORM IN THE LONDON COLLEGE OF SURGEONS.

It is now positively announced that this most Conservative of our Corporations has entered on the path of Reform. Truly we live in an age when events move rapidly. We have a Conservative Government bidding against their old political opponents on the question of Parliamentary Reform, and the equally anomalous fact of the London College of Surgeons listening to the voice of the Profession, and consenting to the changes that have long been demanded. What then is the sum and substance of the concession offered? Henceforth every aspirant to the M.R.C.S. must produce evidence of having passed some examination in Medicine, or must be examined on that subject by a Board appointed by the College *before* receiving his diploma. Certainly this is a step. We regret, however, the idea of erecting another examining board. These separate "little goes" will never add to the dignity of the Profession, nor would they be tolerated, but for the numerous Corporations which possess the right to grant diplomas; and it would be much more satisfactory, both to the Profession and the public, if an arrangement were made whereby a full examination on all necessary points should be undergone before any diploma whatever could be obtained. We have already alluded to the negotiations that have for some time been carried on between the Colleges of Surgeons and Physicians, and we greatly regret that so little good should have been effected. They have managed much better in Scotland, and as the communications between the two London Corporations are still active, we may yet hope to see an equally favourable result. Since the passing of the Medical Act it has been more than ever important for every professional man to have both a medical and surgical qualification, and we cannot but feel that the union of two corporations, already so successful in Edinburgh, to accomplish the object is the simplest solution of the difficulty. The most unpromising part of the whole question is the financial one. The fees at both the London Colleges are heavy, and to double them is no doubt a hardship on the candidates. Mutual concession is the only suggestion we have to make on this point, to which we may add the imperious necessity of quickening their action. While their negotiations "drag their slow length along," young men are growing up and resorting to other institutions. A medical and a surgical diploma is the requirement—all the Universities offer the former, the several Colleges the latter. The Universities now grant a Mastership in Surgery to their medical graduates at a moderate fee. Those who cannot offer themselves for this qualification can go to any College of Surgeons and add to that diploma the very cheap, and we are bound to add, the really respectable, license of the Apothecaries' Society. This last body has done so much to advance the interests of the Profession, and has conducted its examinations of such a spirit, that they will always be esteemed, and unless the London College of Physicians or the Universities should concede a good deal in the way of fees and restrictions, it may count on a long career of continued usefulness.

Our attention has been called to the following semi-editorial paragraphs which appear immediately after the leading articles in the *Cork Reporter* of the 13th inst. We inflict them *in extenso* on our readers, firstly as an instructive lesson as to what, as honourable practitioners, they ought to avoid, and secondly, lest we should be retorted on with a charge of garbling:—

"CORK AS A SEAT OF LEARNING.

"That brilliant epoch in Irish history, when votaries of learning came from all parts of civilized Europe to receive instruction in the "island of saints and sages," seems likely to be reproduced in our own days and in our own city. It is a well-known fact that many individuals have in past years come from the most distant parts of the globe to study law under the able professors of that faculty in the Queen's College here. There are at the present moment several students in that college who have come from very distant places to pursue their studies, and who, of course, selected the place where they expected to enjoy the instruction and counsel of the ablest professors. Amongst those attending the lectures of Dr. Corbett, Professor of Anatomy and Physiology, there are several strangers, including two gentlemen from the West Indian Islands, one from China, two from Dieppe, five from London, Liverpool, and other parts of England, three from Belfast, two from Dublin, &c. This fact speaks trumpet-tongued as to the efficiency of the instruction given by Dr. Corbett, and shows clearly that not only have his abilities been appreciated, but that the fame of his teaching has extended very considerably. A splendid lecture-room and anatomical theatre have just been added to the medical department of the College, owing solely to the forcible manner in which Dr. Corbett pressed on the late Government the necessity of additional accommodation for the numerous students resorting to the

Cork School of Medicine. It is gratifying to be able to direct public attention to these facts, and to feel that in some instances at least the "right men are in the right places."

"DOCTOR TANNER ON SURGERY.

"A rare opportunity of becoming practically acquainted with the manner of performing all those surgical operations, which accident or disease may render necessary, has just been afforded to the gentlemen studying medicine in our city. Dr. Tanner, Professor of Surgery at the Queen's College, senior-surgeon to the County Hospital and South Infirmary, and a practitioner, whose ability and skill have placed him in the foremost rank of his profession, and made his name become known throughout, at least, the South of Ireland, has just concluded an extensive special course of lectures on Operative Surgery, which he has, for some months past, been delivering at the College. This course was distinct from the regular lectures on Surgery, forming a part of the medical curriculum. In addition to pointing out the physiological and anatomical considerations, and the scientific principles on which the several operations were based, he explained and contrasted the different methods proposed by the most eminent continental, and English operators, and his own mode of procedure in those cases in which he deemed improvement admissible. He illustrated his observations by the performance of various operations on the human body. It is unnecessary to allude to the advantage to be derived from attendance at lectures of such a kind, when delivered by so skilful a practitioner and so dexterous a manipulator. The lasting benefit that they must confer on those who had the good fortune of attending them is incalculable. It is unnecessary to mention that lectures so replete with interest, and so full of instruction, and on a subject of such momentous importance, were flocked to day after day with the utmost eagerness. The suggestion of giving these special lectures came from Dr. Tanner himself, and was of course cordially approved of by his pupils. And although every gentleman attending them was willing to pay largely, Doctor Tanner insisted on their being gratuitous. When the additional trouble and the loss of time thus willingly entailed on a busy practitioner are considered, an idea may be formed of the extent of this boon, which is only one of the many unselfish acts for which Doctor Tanner has become proverbial."

The position which Dr. Corbett and Dr. Tanner have hitherto held in Cork, and their high official connection with the Queen's University in Ireland, the Senates of which are presumed to exercise a certain censorship in such matters, give us grounds for the hope that these most unprofessional pseudo-editorial notices were published without their privacy, and contrary to their feeling of medico-ethical honour. Having had no personal knowledge of or local connection whatever with these gentlemen, we cannot be accused of personal animus; and we are slow to believe that medical men holding their rank could for a moment countenance a system of advertising, which should be denounced, if adopted by the commonest surgical journeyman; and we put it plainly for their consideration, whether they will permit their names to be associated in such a transaction without a decisive and immediate repudiation.

Notes on Current Topics.

University Boat Race.—On Saturday last the great boat race between the two English Universities, Oxford and Cambridge, came off as usual on the Thames, between Putney and Mortlake. The interest felt in this annual contest seems to have increased year by year, until at length it has equalled that which some of our most noted race-courses produce. Thousands of people were seen crowding the banks of the river soon after eight in the morning, notwithstanding the inclemency of the day. The weather was cold, and the rain came down incessantly, yet the crowds held their place, waiting under their dripping umbrellas the result of the strife. It was arranged that the start should be made at eight o'clock, but a delay occurred from some cause or other, and it was not until a little before nine that the competitors took the water, and rowed to the starting point. Oxford had the advantage in the choice for place, which she had won. At length the word was given, and the boats were off. It was doubtful all along, from the very first to the last moment when the winning flag was passed, on which side the victory would lie, and the excitement among the spectators during the whole course was intense. Sometimes Cambridge, soon after starting, got a little a-head; then Oxford, by its deep strong pulling, got up again. At Hammersmith Bridge, Cambridge was nearly her whole length in advance, and was loudly cheered by the spectators as she glided beneath it, but afterwards Oxford drew up again amidst deafening cheers, and maintained her superiority for some time. These alternations continued almost to the last, and the issue seemed doubtful up to the very minute when the victory was won—and it was only when the flag was passed and Oxford declared the winner, that any certainty was felt. The rapidity with which they passed along was wonderful, a course of nearly four miles and a-half being concluded in twenty-two minutes thirty-nine seconds. We give a table of these University matches from the first:—

Year.	Winner.	Course.	Time.	Won by
1829	Oxford	Henley	14m. 30s.	Many lnths.
1836	Cambridge	Westminster to Putney	36m.	1 minute.
1839	Cambridge	Westminster to Putney	31m.	1m. 45s.
1840	Cambridge	Westminster to Putney	29m. 30s.	2-3 of a lnth.
1841	Cambridge	Westminster to Putney	32m. 30s.	1m. 4s.
1842	Oxford	Westminster to Putney	30m. 45s.	13 seconds.
1845	Cambridge	Putney to Mortlake	23m. 30s.	30 seconds.
1846	Cambridge	Mortlake to Putney	21m. 5s.	Two lnths.
1849	Cambridge	Putney to Mortlake	22m.	Many lnths.
—	Oxford	Putney to Mortlake	A foul.	
1852	Oxford	Putney to Mortlake	21m. 36s.	27 seconds.
1854	Oxford	Putney to Mortlake	25m. 29s.	11 strokes.
1856	Cambridge	Mortlake to Putney	25m. 30s.	½-a-length.
1857	Oxford	Putney to Mortlake	22m. 50s.	35 seconds.
1858	Cambridge	Putney to Mortlake	21m. 23s.	22 seconds.
1859	Oxford	Putney to Mortlake	24m. 30s.	Camb. sank.
1860	Cambridge	Putney to Mortlake	26m.	A length.
1861	Oxford	Putney to Mortlake	23m. 27s.	48 seconds.
1862	Oxford	Putney to Mortlake	24m. 40s.	30 seconds.
1863	Oxford	Mortlake to Putney	23m. 5s.	42 seconds.
1864	Oxford	Putney to Mortlake	21m. 48s.	23 seconds.
1865	Oxford	Putney to Mortlake	21m. 23s.	13 seconds.
1866	Oxford	Putney to Mortlake	25m. 48s.	15 seconds.
1867	Oxford	Putney to Mortlake	22m. 39s.	½-a-length.

To medical men, one of the most interesting considerations respecting these matches would be the effects upon the health, of the great strain and excitement to which the competitors are of necessity subjected. It is to be regretted that no exact data have been collected, but we may be sure that none but thoroughly sound constitutions should run the risk of such an ordeal.

Strange Death of a Medical Man.—At a private hotel in Arundel-street, an extraordinary death occurred some days ago. From evidence before the coroner, it appears that the deceased was a doctor. He was last seen alive on Sunday week, when he complained of a violent cold and bleeding at the nose; he was evidently unwell and depressed in consequence of the affection at his chest. He was seen to go into his room at twelve o'clock on the Tuesday, but was never seen alive again. On the Saturday following the waiter was sent up to look through the glass over his door, with a view—as deceased said he was going out of town—to see if he had taken his luggage with him, when he saw him lying dead on his bed. Dr. Alfred Harvey was called, and found him in the position described—a blue tinge on the face, the eyes dilated, the knees bent,

and he seemed to have been dead some days. "In a desk close by was some soap liniment and opium, which, no doubt, would have been applied to the chest." By the *post-mortem* examination, the brain was found much congested, but no trace of poison in the body, and he gave it as his opinion that death resulted from congestive apoplexy. The jury returned a verdict accordingly.

University Franchise.—When the Reform Bill was first brought before Parliament, we directed attention to the fitness of University Graduates for exercising the franchise, and urged the erection of new University constituencies. We are glad to find that the University of Edinburgh has taken up the subject, and petitioned the Government. The Edinburgh University offers a constituency of 2000, which could easily be increased by another 500. As to numbers it has, therefore, a better right to one member than either Oxford or Cambridge has to two. We should be very glad to see the petition granted, and we think the other Universities that are not represented may very fairly lay claim to the privilege.

Medical Council.—It is understood that the meeting of this body, which was to have taken place in May, has been postponed. The cause assigned for this is that the Home Secretary has not yet signified the intentions of the Government about the proposal for an amendment of the Medical Act. Is there no other way of meeting delay on the part of the Government than a corresponding procrastination by the Council? If not, we shall expect to hear but little further of the bill.

Vivisection.—Our columns have been more than once occupied with the horrors of vivisection, and opinions in accord with those we have expressed have been echoed by a large number of our contemporaries. We are happy to be able to record the following almost official protest :—

"We, the Court of Examiners for Scotland of the Royal College of Veterinary Surgeons, desire to express our opinion that the performance of operations on living animals is altogether unnecessary and useless for the purpose of causation :—

"James Syme, Chairman.
"James Dunsmure, M.D., P.R.C.S.E.
"J. Warburton Begbie, M.D.
"John Lawson, President of the Royal College of Veterinary Surgeons.
"R. Cartledge, M.R.C.V.S., Consulting Member of Council.
"William Cockburn, M.R.C.V.S.
"William Robertson, M.R.C.V.S.
"Charles Secker, M.R.C.V.S.
"James Cowie, M.R.C.V.S.
"I fully concur in the above.
"William Wilkinson, Principal Veterinary Surgeon to the Forces."

Frightful Mortality.—Reports from the Mauritius inform us that yellow fever is rife to a fearful extent among the Indian and Creole population of that island. Last year it appears that the average death-rate in Port Louis was 10 per day, which subsequently increased, till at the time the intelligence was sent off it had reached from 95 to 100, and for the whole island about 200 per day. Burials were constantly taking place, and the epidemic was interfering sadly with industrial employments of all kinds. "Temporary hospitals were being erected every where. Quinine, the principal remedy, it is said, has reached a fabulous price, one ounce being sold for 137 dollars, or £27 8s., there being but a few ounces left in the island."

Coroner's Report.—A few particulars selected from the annual report of Dr. Lankester, the Coroner of Central Middlesex, may not be uninteresting to our readers. He and his deputy, Dr. Hardwicke, held no fewer than 1385 inquests during the year, being 139 more than the previous year. He classifies the causes of these deaths, and records the singular fact that the average of infanticide and fatal accidents is steadily increasing, while that of all other causes remains just where it was. In connection with infanticide, he thinks there ought to be a registration of still-born children. He remarks on the subject of infectious diseases, that in some of those cases which came before him, there was "evidently gross neglect of the most ordinary sanitary arrangements," to which he attributed the death. He thinks that the advantage to the public of these inquiries is not yet fully apprehended. It has been found that the inquest with its consequent verdict has, in many cases, aroused the neighbourhood, and led to immediate sanitary improvement. During the past year small-pox made its appearance in London. Several hundreds have lost their lives by that epidemic, which is still extending. This disease, he says, he feels assured, has arisen and spread through neglect of vaccination, and he has felt it his duty to hold inquests when he knew that children had died of that disease without being vaccinated, as he considers that such cases come as much under his supervision as all causes of death which might by care and forethought be avoided. Vaccination is important in several respects. Persons who have been vaccinated and who take small-pox, are not so likely to die as the unvaccinated. Those not vaccinated take the disease more largely in proportion to their numbers than the vaccinated, and thus become the means of spreading this loathsome and dangerous disease. There is a law of fine for not having children vaccinated, and he suggests, whether, under all these views, persons who violate that law are not liable to a verdict of manslaughter, if it is shown that the children thus neglected die of small-pox. On suicide he remarks, its "permanence," its "mystery," suggests the necessity of the Coroner having power to hold inquests on all persons dying in workhouses as well as in prisons, and points to the fact that reform in workhouse management has originated in the Coroner's Court.

Pauperism in Winter.—The past winter has been characterised by the large amount of distress which has prevailed in this country. The severity of the weather was undoubtedly the cause of the increase in the number of persons applying for relief above that of last year. In January, when the frost was keenest, the destitution was greatest, as the returns of the Poor-Law Board for that month will show. The proportion was very unequal in the different divisions of the kingdom—in the metropolis it exceeded that of any other part, showing that where wealth abounds, poverty abounds also, but there was no one of the divisions where the pauperism did not exceed that of last year. Thus, in the district least affected, the number of persons receiving relief in January last, was 2·7 per cent. more than in the same month last year, while in London it was no less than 72·6 per cent. For more than three years, in the north-western division, pauperism had declined month by month, when suddenly, in January, 2000 a-day were added to the 100,000 already existing, and in London, for a fortnight, nearly 3000 a-day. The contributions of the charitable flowed in, and the grand

cause—the cold—abating, the destitution was much lessened at the end of the month, so that in the same districts the increase, instead of being respectively 27·4 and 72·6 per cent., became 12·7 and 57·3 per cent., and in the whole of England it was reduced to 13·7 per cent.

HEALTH OF SCOTLAND.—Prosperity in commerce and manufactures is generally followed by an increase of the marriage-rate in any locality where it occurs. There has been great demand for labour, and high wages at Greenock, in the iron ship-building yards for some years past, and consequently the marriage-rate has been higher there than in all the other Scottish towns. But the strike for higher wages in the latter part of 1866 has reduced the marriage-rate below that of four other large towns. Thus, in the first quarter of 1865, the marriages were 151, and only 85 in the first quarter of 1867. Dundee had the largest proportion of marriages in 1866, owing, no doubt, to the great increase in the manufacture of flax, jute, and hemp. In the eight principal towns of Scotland the marriages in the first three months of the present year have been fewer than in the first quarter of the two preceding years, and the same likewise with the births, notwithstanding the high marriage-rate of the last two years. The aggregate population of these towns is about 944,000, and there have been registered the first quarter of this year 9539 births, 2068 marriages, 7457 deaths. The severe cold in January is considered to be the cause of the large mortality of that month—the mean temperature averaging only 0·9 above the freezing point, the lowest since it began to be registered in Scotland in 1855. In February the temperature was considerably above the average, but in March, as much below; and the mortality in these months was below the average, so that though it was high in January, yet in the quarter it was below the average of the same quarter in two previous years. Typhus continues epidemic in Scotland to a certain extent, and has caused 368 deaths in the last quarter in the eight towns referred to. Cholera caused 9 deaths in January, 3 in February, but none in March; diarrhœa 104, which is a larger number than usual for that period of the year. The mortality among children was large in 1866, above thirty-eight per cent. of the deaths. The Registrar-General gives the following figures:—Of children, under 5 years of age, 5·4 per cent. died at Perth; 7·4 per cent. at Paisley and Leith; 7·7 per cent. at Edinburgh; 9·7 per cent. at Greenock; 9·8 per cent. at Glasgow; and 10 per cent. at Dundee and Aberdeen. Hence, the deaths of children seem proportionate to the largeness of the population. Zymotic diseases have been prevalent in these last two towns.

Correspondence.

THE BAKER BROWN PERSECUTION.

TO THE EDITOR OF THE MEDICAL PRESS AND CIRCULAR.

Sir,—I beg to hand you the report of two speeches made by Dr. Hall Davis, which I have extracted from the printed proceedings of the annual meetings of the London Surgical Home.

I am at a loss to know how to reconcile these speeches with the conduct of Dr. Hall Davis as President of the Obstetrical Society, when he permitted Mr. Seymour Haden to indulge, unchecked, in abuse and insinuations against Mr. Baker Brown that had no foundation in truth, as also against an Institution, that, in addition to Mr. Brown, has had on its staff, and now has, gentlemen, who, if they cannot vie with Mr. Seymour Haden in his singular way of showing his regard for truth, are at least entitled to the respect due to their opinions. Prominent amongst these stood Dr. Hall Davis, whose report is confirmed by a numerous and influential body of Medical men in all parts of the world, the written evidence of which is in the possession of your obedient servant,

HOLT DUNN.

Extract from the Proceedings of the Third Annual Meeting of the London Surgical Home, June 19th, 1861.

"Dr. HALL DAVIS:—I beg to return you the sincere thanks of the Medical staff for the kind manner in which the thanks of the meeting have been proposed and responded to. For my own part I cannot lay claim to even a small portion of the thanks that have been accorded to us. My services in this Institution are of a very subordinate chararcter, of a very light description, though, upon all occasions on which I have been called upon to assist my colleagues in anxious deliberation upon the critical cases that have come before them in this Institution, I believe they have ever found me ready to attend. During my different visits to the Institution, I have been present at many of the operative proceedings, and I may say that those operations have interested me very greatly, not only on account of the high object at which they aimed, but on account also of the great coolness, the great moral courage, the great skill, the delicacy which has characterized the performance of those operations. As I am not an active member of the staff, and only attend professionally upon certain occasions, and other times when my interest may lead me there, I take this opportunity of congratulating Mr. Baker Brown upon the great success which he has attained in the treatment of the special diseases which have come under our notice; diseases which, for many a long year, have been the opprobrium of our hospitals, and have admitted of no cure, though I have frequently witnessed attempts, yet I have seen those attempts disastrously fail. At one time I knew very little about this Institution, but as soon as I came to know of its beneficial operations, I did not allow myself to be prejudiced by a great many remarks which were made with regard to the proceedings of Mr. Brown at this Institution, but I thought it only fair to that gentleman that I should examine into the matter myself. Being lecturer on a very important department of medical treatment in reference to the diseases of females, it was my duty, I thought, to investigate the matter, and to see how much of truth lay in the statement which has been made, and I was very much pleased, I may say, upon my first visit, still more pleased upon my second and third visits, and the consequence was my visits ultimately became more frequent, and I was induced, upon the success of a very severe case which Mr. Brown admitted to me was one of the most severe cases he had ever met with, to place another case under his care, in the cure of which there was no hope to be expected from any other institution, and I am glad to say that the patient was completely cured within a very few days; she had been for many years a very severe sufferer, but Mr. Brown, with his admirable skill and dexterity, effected a complete cure of the patient. I have seen a great many operations at the Home, and I have been struck with admiration at the great skill and the great coolness which have been exhibited on those occasions, and when I make use of the expression 'coolness' I do not mean that there was any want of feeling on his part, there was great feeling exhibited, and great humanity has characterised all the proceedings of the Institution, and pervaded the entire establishment. The patients are loud in their expressions of gratitude to everybody concerned in the active proceedings of the Home, the lady visitors, the lady superintendent, the clergy, the nurses, and the medical officers, and they are especially loud in their grateful expressions to Mr. Brown for the very kind and skilful care which he has shown in the treatment of their cases."

Extract from the proceedings at the fourth Annual Meeting at the London Surgical Home, Tuesday 24th June, 1862.

"Dr. HALL DAVIS—I beg to move, 'that the thanks of this meeting be hereby given to the trustees, to the treasurer, and to the auditors, for their kind service during the past year.' It was not my intention to have made any remarks at this late period of the meeting. I would rather have spared the patience of the ladies who have kindly given their presence to day, had not Mr. Baker Brown kindly expressed his opinion of the humble services which I rendered, or rather have rendered during the last two years to the Institution, which services were rendered with very great pleasure and willing-

ness, and not altogether without a very considerable return in the way of compensation to me for my expenditure of time which I bestowed. During my attendance I have been very much gratified with what I have read, and have been very much gratified with the results of the treatment of the most difficult and critical cases, and cases which only a few years ago were held to be totally incurable. I have been very much pleased, and very much obliged to Mr. Baker Brown for his kind attention on different occasions to patients whom I have sent into the Institution myself, who had no opportunity of being satisfactorily treated, at least, in my opinion, elsewhere, more especially on account of want of proper appliances, and want of proper nursing, and the want of that amount of fresh air which fortunately is supplied to the patients who come into this Institution. The consequence of all these advantages which patients receive in this Institution is, that the percentage of cures is very much larger than is obtained in many other Institutions. Mr. Baker Brown has great reason to be pround, as Mr. De Meric very truthfully observes, when he looks back upon the results of his own treatment, assisted by the co-operation of his intelligent colleagues; results, not only here, but in other parts of the world. Operations performed here have been repeated in other institutions where heretofore, they were not attempted. The example has been set here of undertaking very bold operations—operations, however, which are justifiable, inasmuch as without them there was nothing left for the poor patient but utter hopelessness and misery for the rest of her days. But by the skilful appliances of this Institution, and by the courage and skill displayed in the wonderful operations of Mr. Baker Brown, the greatest success has been achieved in many instances where, in other institutions, no hope whatever was held out to the patients. I can fully endorse all that has been said by Mr. De Meric, and also by Mr. Brown, with regard to the advantages which have been afforded by this Institution, as regards the appreciation which the efforts here have met with on the part of foreigners. I have been present at a large number of operations during the two years I have had the good fortune to be connected with this institution, and it has been a great pleasure to me to see the great interest which has been shown by these foreigners in the operations that were performed. I was not at all surprised at that interest, when I considered the extreme delicacy and consideration with which these operations are gone through, and the great courtesy shown by Mr. Brown, and the great readiness he has always manifested to communicate the extensive information he possesses with regard to those most intricate and difficult operations. My thanks I again beg to tender to Mr. Brown for his extreme kindness in expressing himself in the manner he has done, and also for the courtesy and good fellowship which he has shown upon all occasions during my connection with the Institution in the last two years. He has, he may feel well assured, my best wishes for his success—and success has always been associated with him—and for the success of the Institution."

TO THE EDITOR OF THE MEDICAL PRESS AND CIRCULAR.

SIR,—The Rev. J. P. Gell presents his compliments to the Editor of THE MEDICAL PRESS AND CIRCULAR, and begs to submit for publication a copy of the letter addressed to Mr. Isaac Baker Brown by the clergy visiting the London Home, a copy of which has been sent to the Council of the Obstetrical Society. The Home is within Mr. Gell's parochial charge, and the clergy of the three adjoining parishes are included among the visitors :—

"SIR,—We have received the proceedings of the Obstetrical Society of London, on the 3rd inst., as published, resulting in your removal from the Society by 194 votes to 41.

"We regret the character of Mr. Haden's attack on you, part of which was only uttered to be withdrawn by himself, and part was disposed of by the President in ruling that the Society had not met to consider a specified operation, but the manner in which you had performed it.

"Still more do we regret that Mr. Barnes, the supporter of Mr. Haden, should have avowed to you that my 'friend cannot be yours,' and, with such a sentiment on his lips, should have been appointed (as the *Lancet* reports) a scrutineer; and that the President should have directed the ballot to proceed, 'for the convenience,' as the Secretary explained, 'of those who have made up their minds one way or the other,' before you could begin your reply, but after Messrs. Haden and Barnes had been heard.

"But, more deeply do we regret, that the charges of operating for improper reasons—*i.e.*, for cure of cases legally inadmissible at the Home, and in an improper manner—*i.e.*, unknown to the natural protectors of the patient, should have been partly admitted by yourself, and partly established by the evidence; and that when Mr. Pym had your authority for writing to the papers on the 4th February last, to say that you had given up an operation which had been brought in question, pending professional inquiry, you nevertheless repeated it in a modified form on the 21st of February, in the presence of Mr. Locking.

We would remind that you told us, at a public annual meeting at the London Home, that with regard to hysterical mania, many cases had been brought in, and almost without exception cured; and, we think, the same information should not have been withheld from the Commissioners of Lunacy when they sought for it. Such candour, even had it involved a sacrifice, would have better sustained the high character the London Home has acquired from the testimony of numbers who have been treated successfully for various disorders within its walls, and who have given us abundant evidence of the care and kindness which they have met from you.

Our interest in the patients will continue undiminished, but we feel it right to state openly the impressions we derive from the action of a Society which we respect as a powerful exponent of medical feeling and opinion.—We remain, sir, your obedient faithful servants,

THE CLERGY VISITING THE HOME.

To I. B. Brown, Esq., London Home.

DEATH FROM CONGESTION OF THE BRAIN.

TO THE EDITOR OF THE MEDICAL PRESS AND CIRCULAR.

SIR,—In examining a splendidly developed child, aged about four years, who died of congestion of the brain, all the other organs being healthy, I found only one kidney, which was in its proper situation and perfectly normal, but weighing three ounces and three drams. The supra renal capsule was not weighed, but appeared to be of the usual relative proportion to a kidney of that size. There was no rudimentary kidney or blood-vessel on the other side. The child was very quick, but suffered frequently from brief attacks of headache.—Yours truly,

ALBERT HIND.

LITHOTOMY AND LITHOTRITY.

TO THE EDITOR OF THE MEDICAL PRESS AND CIRCULAR.

SIR,—I am directed to inform you that, during the year ending December 31, nine cases of stone in the bladder were admitted into St. Peter's Hospital.

The children, four in number, were lithotomised, and the adults, five in number, were operated on by lithotrity.

The result was in every case successful.—I remain, sir, your obedient servant,

J. CÆSAR, Secretary.

MR. BANON'S RECENT CASE OF OVARIOTOMY.

TO THE EDITOR OF THE MEDICAL PRESS AND CIRCULAR.

SIR,—At the last meeting of the Surgical Society of Ireland I detailed the particulars of a case in which ovariotomy was performed by me under peculiar and very unpromising conditions. The patient having progressed up to the time of my communication much more favourably than we could have hoped for, we began to entertain some hopes of her ultimate recovery, but, unfortunately, the result in the end proved unfavourable, she having died on the evening of the 13th day after the operation, most unexpectedly. She had progressed steadily, as far as we could judge, up to within an hour of her death, had taken plenty of nourishment with enjoyment, and complained of no pain; pulse had come down, and she enjoyed plenty of sleep. The tympanites, however, annoyed her a good deal, and resisted all our endeavours to remove it. About an hour previous to her death the breathing all at once became hurried, the pulse irregular and indistinct, and she sank into a state of syncope, from which she never rallied. On a post-mortem examination the intestines were pale, but adherent, slightly, partly to the first wall of abdomen and to each other, evidently from the effects of a low form of peritonitis. There was no serum, and but slight traces of lymph anywhere to be seen; the uterus and right ovary healthy; no trace of ligatures placed on pedicle could be found. The wound made during operation completely healed in all its parts.

The stomach and colon, however, were found to be enor-

mously enlarged and distended with flatus, and literally occupied two-thirds of the left thoracic cavity, seriously pressing on the left lung and heart, and it is to the interference thus produced on the functions of these organs that I attribute the immediate cause of death. Whether this patient would have ultimately recovered were it not for this unfortunate complication, it is of course difficult to say, but having just reached the 14th day with daily improving symptoms it is difficult to account for the sudden mode of death, otherwise than as I have attempted to do. It will be recollected that the operation was undertaken to relieve the most urgent sufferings of this poor girl, which, in the opinion of all who saw her, must have proved fatal to her in a very few days. I therefore believe that the operation performed in her case cannot be looked on as wholly unsuccessful, having been the means of not only prolonging her life, but of relieving her from the most agonizing sufferings.—I have the honour to be, sir, your obedient servant,

A. Banon, M.D.

THIRD REPORT

ON THE PROGRESS OF PHARMACY,

SUBMITTED TO THE BRANCH MEDICAL COUNCIL (IRELAND),

By WM. DANIEL MOORE, M.D. Dub., et Cantab., M.R.I.A.,

EXAMINER IN MATERIA MEDICA, PHARMACY, AND MEDICAL JURISPRUDENCE, IN THE QUEEN'S UNIVERSITY OF IRELAND.

(Continued from page 328.)

A NEW TEST OF THE PRESENCE OF IODINE IN FLUIDS.

M. Laronde proposes, in the number of the *Journal de Pharmacie et de Chimie*, for May, 1866, p. 356, *a new test of the presence of iodine in fluids.* Put into a test tube 10 grammes, for example, of the fluid to be analysed, with one gramme of oil of petroleum. Shake well together, and add nitric acid, drop by drop, until all coloration ceases to be manifested. Then let two drops of solution of chloride of lime fall in, and shake the mixture briskly. The oil of petroleum rises to the upper part of the tube, carrying with it in solution all the iodine contained in the liquid, and acquiring thereby a more or less intense rose colour.

JALAP.

The number of the same journal for February, 1866, p. 107, contains a notice of an essay upon *jalap*, by M. Andouard, which was "crowned" by the Société de Pharmacie de Paris. It appears to me, however, that the article in question contains nothing to which it is specially necessary to call the attention of the Council. In connexion with this subject, I may note the appearance of a paper by H. Spirgatis, in the *Annalen der Chemie und Pharmacie*, for July, 1866, p. 41, upon Turpeth Resin, the product of the Ipomœa Turpethum, one of the convolvulaceæ indigenous in Ceylon and on the coast of Malabar, and which was, it is said, employed in the middle of the 18th century, under the name of Radix Turpethi, until displaced by Jalap Root, and which has again come into use as a constituent of a secret remedy, much approved in France, the purgative drink of le Roy.

The *Bulletin general de Therapeutique* for 15th January, 1866, p. 24, contains a description of the *Solanum paniculatum* or *Jurubeba* as it is called in Brazil, which is lauded as a more energetic tonic and deobstruent than any contained in the Materia Medica.

Buchner's *Repertorium*, Band xv., 1866, contains, at page 4, under the head of Phytohistological contributions, a long article by Dr. August Vogl, upon *Kamela*.

A paper on *Mastich*, by F. A. Flückiger, may be found in the *Repertorium*, Band xiv., p. 309.

METHOD OF PREPARING MUSK FOR INTERNAL USE.

M. Sailler (*Journal de Pharmacie et de Chimie*, April, 1866, p. 291) recommends the following *method of preparing Musk for internal use:*—Rub the musk with a few drops of *boiling* water, then with a larger quantity, and add this solution to the vehicle prescribed by the physician, whether this be mucilaginous or not.

"By cooling, the musk partially loses, it is true," observes the writer, "its solubility; but it is then precipitated in the form of a very fine powder, and, mixing easily with the liquid when shaken, it may be taken by the patient without remaining in the mouth, as is the case with mixtures prepared with cold water. By this process, which in no way alters the qualities of the musk, it is not necessary to have recourse to the mucilaginous vehicle generally recommended to facilitate its suspension."

CHARCOAL PENCILS TO REPLACE THE ACTUAL CAUTERY.

In the May (1866) number of the same journal, p. 358, is a form for *Charcoal pencils to replace the actual cautery*, recommended by M. Bretonneau:—"Light powdered charcoal, 20 parts; nitrate of potash, 1½ parts; gum tragacanth, 5 parts; water, 24 parts; make a pillular mass, to be divided into cylinders of the size of an ordinary pencil, and about 10 centimètres (nearly four inches) in length."

In the *Annalen der Chemie und Pharmacie* for July, 1866, p. 62, is a long chemical paper by Carl Bulk, of Netphen, upon *Crotonic Acid*, a constituent of croton oil.

M. J. Léon Soubeiran contributes to the *Journal de Pharmacie et de Chimie* for March, 1866, p. 161, a description, illustrated with woodcuts, of the mode of manufacturing cod-liver oil adopted in Norway.

NEW FACTS RELATING TO FIXED OILS.

In the May number of the same journal, p. 332, is a paper by Mr. J. Nicklès, entitled "*New Facts relating to fixed Oils.*" The author states that oil of sweet almonds (which, he informs us in a note, is made, by preference, from bitter almonds, on account of the facility of disposing of the residue to perfumers for use in the preparation of almond paste), is commonly adulterated with a cheap oil called oil of apricots. This and other adulteratious are, we are told, easily detected by the reaction described in the following propositions:—

"1. At a temperature below 212° F., hydrate of lime in powder is without action on colza oil, olive oil, and oil of sweet almonds.

"2. With other oils, and especially with oil of apricots and castor-oil, this hydrate gives rise to a coagulum more or less thick, soluble in warm fixed oils, but separating on cooling.

"3. This coagulum may be isolated by filtration; so that it is possible to free from oil of apricots the more expensive olive and almond oils.

"4. The said coagulum is produced, even when the non-coagulable oil contains only about one hundredth part of oil of apricots."

OPIUM.

On the subject of *Opium* I have references to five several papers. The first, by M. Deschamps, to be found in the *Bulletin general de Therapeutique*, 30th November, 1865, p. 452, relates to the "Black Drop" formerly so much in use in this country. The author, after many experiments, comes to the conclusion that nothing is known respecting its composition. A formula for its preparation appears in the new edition of the French Codex, just published.

The second, contained in the *Journal de Pharmacie et de Chimie*, for May, 1866, p. 386, is on the physiological and therapeutical action of *Narcein*. According to Dr. Liné, this alkaloid possesses in the highest degree the dormitive property of opium, in addition to which it is said to have certain advantages:—1. Of producing only in a very slight degree, or not at all, the phenomena consecutive to sleep obtained by means of morphia and its salts—headache, discomfort on awaking, tendency to syncope; 2. Of not confining the bowels, but rather facilitating their action—in large doses it occasions diarrhœa; 3. It produces more or less decided retention of urine, leading the author to suggest its use in children affected with nocturnal incontinence of urine. This opinion is corroborated by that of M. Ozanam, who attributes to this principle a particular action on the lumbar portion of the spinal cord.

The third paper, which appears in the *Bulletin general de Therapeutique*, 30th May, 1866, p. 444, is also on the medical use of Narcein. Dr. A. Eulenburg assigns its dose as ranging, for internal use, from $\frac{1}{6}$ to $\frac{1}{2}$ grain, and for hypodermic employment from $\frac{1}{8}$ to $\frac{1}{4}$ grain. The price of narcein is still rather high, the cost of one grain being 70 centimes, or 7*d*.

MECONIC ACID.

The fourth essay, in the number of the *Annalen der Chemie und Pharmacie* for May, 1866, p. 191, is on the reduction-products of *Meconic Acid* and its derivatives.

The fifth, in the *Bulletin general de Therapeutique* for 30th June, 1866, p. 529, is on the antagonism of opium and belladonna.

The number of the same Journal for 15th May, 1866, contains, at page 411, a paper by M. Amédée Vée, upon *Pepsin* and its preparations.

RHŒADIN.

O. Hesse has discovered in the capsules of the Papaver Rhœas, a new alkaloid, which he calls *Rhœadin*. In the cold

it is in a short time decomposed by the most different acids, the solution becoming of a beautiful purple red colour ; while the alkaloid, which was at first colourless, is converted into a brown amorphous mass. Rhœadin exists also in the better kinds of opium, though it is not to be obtained in a pure state from them. Buchner's *Repertorium*, Band xv., No. 3, 1866, p. 139.

SANTONIN.

M. Méhu contributes to the *Journal de Pharmacie et de Chimie* for April, 1866, p. 272, a "chemical and physical study" upon *Santonin*. He finds that red, yellow, orange, and green glasses prevent the yellow coloration of this principle, while blue and violet glasses excite it. Unlike erythrocentaurine and red phosphorus, santonin coloured yellow by light is not restored to its colourless condition by heat, but only by the action of solvents. Santonin rendered yellow by light has its point of fusion lowered from 338° to 311° F.

Professor Dr. C. D. Schroff contributes a long paper upon *Squill* to Buchner's *Repertorium*, Band xv., 1866, Nos. 4 and 5, p. 181.

The *Annalen der Chemie und Pharmacie* for May, 1866, p. 190, contain a short note on *Scoparin*, the crystallized yellow colouring matter of the Spartium Scoparium, first described by Stenhouse.

At page 230 of the same may be found a paper by W. Lossen, upon *Atropia*, too purely scientific to require notice here.

LIQUOR ARSENICALIS.

In the *Journal de Pharmacie et de Chimie* for April, 1866, p. 291, is a notice of a proposal, by M. Hager, of a plan for greatly facilitating the preparation of the *Liquor Arsenicalis*. The peculiarity of M. Hager's method consists in not adding all the water at once. He introduces into a glass tube, well dried to prevent the arsenious acid adhering to its sides, the powdered arsenious acid, and afterwards the carbonate of potash ; the tube is shaken a little to mix the two substances; a few drops of the water are added ; the tube is heated in the flame of a spirit lamp ; the two salts melt very rapidly, and, by ebullition with the rest of the water, the solution is complete.

LIQUOR ATROPIÆ.

Sir William Wilde finds the instillation of the *Liquor Atropiæ* of the British Pharmacopœia to cause great pain. Is this due to the quantity of spirit present? Sir William some years ago (*Dublin Quarterly Journal*, vol. ii., November, 1846, p. 553), recommended the use of solutions containing, respectively, 1, 2, and 3 grains of atropia to the drachm of distilled water—one drop of Dilute Nitric Acid was added to dissolve the alkaloid, with 3 drops of Rectified Spirit to make the solution keep.

Sir William informs me that he now uses a solution of sulphate of atropia, which keeps long enough without the spirit.

In preparing the *Liquor Strychniæ* I found it necessary to rub the Strychnia with the acid alone in the first instance, and subsequently to add the water and spirit. Made according to the Pharmacopœia, the alkaloid did not dissolve.

The *Bulletin general de Therapeutique* for 30th November, 1865, p. 433, contains a paper on the preparation, properties, and therapeutical uses of the permanganate of potash.

M. Filhol contributes to the *Journal de Pharmacie et de Chimie* for July, 1866, p. 22, a paper on the preparation of medical tinctures. The author, believing that many vegetable principles undergo changes even in alcoholic solution, urges the necessity of preparing tinctures only in small quantity, and thinks that the active principles may be preserved better in dried leaves, flowers, &c., than in the form of tincture. Extensive observation would, in my opinion, be required to establish his views, so contrary to those generally entertained.

CATECHU LOZENGES.

At a meeting of the Dublin Chemical Club, held on the 7th June, 1866, Dr. Frazer objected to the introduction of Capsicum into the *Catechu Lozenges* of the British Pharmacopœia, on the ground that to many persons who might require the astringency of the catechu the stimulus of the Capsicum might be objectionable. He recommended a lozenge of sugar, gum, pale catechu and cinnamon. It would probably be better to have a separate form for a capsicum lozenge.

OINTMENT OF IODIDE OF POTASSIUM.

M. Mohr proposes to prevent the brown discoloration of *Ointment of Iodide of Potassium* by adding hyposulphite of Soda to the ointment. Six grains would be about the proportion of the hyposulphite for 64 grains of Iodide.—*Journal de Pharmacie et de Chimie*, October, 1865. p. 319.

The same Journal copies, p. 318, from the *Pharmaceutical Journal*, Messrs. Draper and Whitla's proposal to prepare *Vinum Ferri* with ammonio-citrate of iron, 10·5 ; citrate of ammonia, crystallized, 3·9 ; sherry, 500.

Valerianate of Quinia is rather frequently used. Would it be well to introduce a form for it ? The new French Codex has one.

SENNA LEAVES.

Professor Dragendorff, of Dorpat, contributes to Buchner's *Repertorium*, 1866, Nos. 6 and 7, p. 275, a paper on "the active principle and some other constituents of *Senna Leaves*;" the latter including a saccharine substance, to which Hr. Kubly gives the name of Cathartomannite.

THE FRENCH CODEX.

While transcribing this Report I received *the new edition of the French Codex*, the appearance of which, after a lapse of twenty-nine years, deserves mention in a Report on the Progress of Pharmacy, notwithstanding that the introduction of such a preparation as the *Syrupus de Limacibus* into the British Pharmacopœia would justly be considered retrograde. The editors have aimed at giving to their work more or less of an universal character ; accordingly, it contains a great number of preparations—for example, it has at least 65 syrups against 15 in the British Pharmacopœia, while the 75th and last chapter is devoted to a selection of formulæ from principal foreign Pharmacopœias. The inconvenience is pointed out of having in two adjoining countries, designated under the common name of Syrup of Hydrocyanic Acid (*Sirop d'Acide cyanhydrique*), a medicine which in Belgium contains 4 milligrammes of its powerful active principle ; while in France it contains, according to the new Codex, 10, and did contain, according to the old, 17 milligrammes in the tablespoonful (20 grammes). This inconvenience the editors have sought to lessen by diminishing the difference between the two preparations ; while, with respect to Laurel Water, they have completely assimilated the French to the Belgian formula.

Medical News.

ROYAL COLLEGE OF SURGEONS, LONDON.—The following gentlemen passed their primary examinations in anatomy and physiology at a meeting of the Court of Examiners, on the 16th inst., and when eligible will be admitted to the pass examination :—

Messrs. Edward Elphick, J. F. Chittenden, A. A. Thomas, J. T. Jones, John Phillips, Frederick Robertson, R. Bowen Hogg, George W. Shipman, W. Egerton Saunders, George Bradley, and John Tuck, students of Guy's Hospital ; Charles E. Little, Thomas C. Thornicroft, W. Prideaux Adams, W. H. Montgomery Smith, and Edward H. Hugo, of the Charing-cross Hospital ; Walter Rosser, E. Allan Waterworth, William Harris, Henry Harris, and James Tompsett, of St. Thomas's Hospital ; John G. Colborne, H. Adney Bale, James Charlesworth, and Thomas E. Clarke, of the Middlesex Hospital ; Andrew Boutflower, J. Pennock Sleightholme, and Charles F. Rigg, of the Manchester School ; Thomas Briscoe and William Bishop, of University College ; William Little, of King's College ; J. De Vere Hill, of Liverpool, and John W. Wood, of St. Bartholomew's Hospitals.

ROYAL COLLEGE OF PHYSICIANS OF LONDON.—At a meeting of the Fellows held on the 15th instant,

James Alderson, M.D., Oxon, F.R.S., was elected president of the College.

At the same meeting the following gentlemen, having undergone the necessary examination, were duly admitted members of the college :—

Frederick Simms, M.B., London, 46, Wimpole-street ; Charles Gainer, M.D., Pisa, St. Remy de Provence, France ; William Matterson, M.D., St. Andrew's, York.

Also, at this meeting, the following gentlemen, having undergone the necessary examination, and satisfied the college of their proficiency in the science and practice of medicine, surgery, and midwifery, were duly admitted to practise physic as licentiates of the College :—

James Goodridge Anderson, St. Mary's Hospital ; William Jones Williams, M.D., Edinburgh, 32, Grafton-street East ; William Alexander Slater Royds, 23, Pentonville-road ; Francis Rhodes, M.B., Glasgow, Withington, near Manchester ; Joseph Moore, M.D., McGill College, Toronto, Canada West ; Herbert Chrippes Upton, Petworth Park, Sussex ; Newton Ramsey Colter, M.D., Harvard, Canada ; William Alsept Richards, 42, Carey-street, Henry Morris, 15, Merrick-square, Southwark ; Frederick William

Young, University College Hospital; Charles Marchant Jones, Amoy, China; James Nicholls, M.D., St. Andrew's Chelmsford, Essex; Walter Bayne Geikie, M.D., Victoria College, Aurora, Canada West.

The following gentlemen were reported by the examiners to have passed the primary examination for the licence :—

Charles Aldridge, Leeds; Henry Trentham Butlin and Thomas Smith, St. Bartholomew's Hospital; James Charlesworth, Middlesex Hospital; Robert Harris, Guy's Hospital; William Kipling and Baron Alfred Rugg, University College; James Ryall Rouch, 180, Strand; John Pennock, Sleightholme, Manchester; Leonard Smith, St. George's Hospital.

KING AND QUEEN'S COLLEGE OF PHYSICIANS, IRELAND.—The following gentlemen obtained the Licence in Medicine during January, February, and March, 1867 :—

W. A. Attwood, London; T. S. Cogan, Dublin; G. L. Griffin, 5, Charleston-road; W. G. Grimshaw, 13, Molesworth-street; W. J. Hepburn, 26, Arran-quay; G. C. Irving, 68, Morehampton; S. Keilett, Virginia, Co. Cavan; E. A. Mullins, Ennis; A. O'Flynn, Sligo; J. H. Scott, Dromore,

The following gentlemen obtained the Midwifery Diploma during the same period :—

W. A. Attwood, T. S. Cogan, G. L. Griffin, G. C. Irving, S. Kellett, J. H. Scott.

UNIVERSITY OF EDINBURGH.—The half-yearly meeting of the General Council of Edinburgh University was held on Tuesday week, Principal Sir David Brewster presiding. Mr. Gilbert was elected Secretary, in the room of the late Mr. Alexander Smith. The General Council having at the last meeting represented to the University Court the propriety of memorializing Government to assign one representative to the University of Edinburgh in the event of any measure of Reform being introduced, the deliverance of the Court was now read, to the effect that the Court had memorialized Government and petitioned both Houses of Parliament in terms of the representation of the General Council. The Rev. K. M. Phin, Galashiels, moved that the Council should also itself take action in the matter at the present favourable opportunity. The University of Edinburgh presented a constituency of upwards of 2,000, which was capable of being increased to 2,500. It had a larger constituency than the three other Scottish Universities put together, which might also be considered entitled to one representative. It had a larger constituency than Trinity College, Dublin, which had two members, and in point of numbers had a better right to one member than the Universities of Oxford and Cambridge had to two. Professor Christison seconded the motion, and it was resolved to transmit the petition for the House of Lords to the Duke of Buccleuch, and the petition for the House of Commons to Mr. Moncreiff, M.P. The Council then took into consideration the report of a committee on certain proposed changes on the course of study in Arts. The proposal was that it should be optional to the candidate for a degree in Arts to omit one of three classes in mental science—namely, moral philosophy, logic, or rhetoric, and to take in lieu one of the following classes in physical science—namely, chemistry, physiology, natural history, political economy, or botany. The report elicited so much difference of opinion and so strong opposition that it fell to the ground. A letter from a committee of the General Council of St. Andrew's University as to the institution of a general competition among the Scottish Universities for honours in Arts, or alternatively the foundation of open scholarships, was referred to a committee. The meeting then adjourned.

HEALTH OF THE METROPOLIS.—The Registrar-General, in his weekly return, states : In the week that ended on Saturday, April 13, the births registered in London and twelve other large towns of the United Kingdom were 4383; the deaths registered, 2996. The annual rate of mortality was 25 per 1000 persons living. In London the births of 1048 boys and 1057 girls, in all 2105 children were registered in the week. In the corresponding weeks of ten years, 1857-66, the average number, corrected for increase of population, is 2157. The deaths registered in London during the week were, 1372. It was the fifteenth week of the year; and the average number of deaths for the week is, with a correction for increase of population, 1481. The deaths in the present return are less by 109 than the estimated number. The deaths of five persons who were killed by horses or carriages in the streets were registered. The annual rate of mortality last week was 23 per 1000 in London, 30 in Edinburgh, and 35 in Dublin; 18 in Bristol, 22 in Birmingham, 28 in Liverpool, 29 in Manchester, 29 in Salford, 22 in Sheffield, 23 in Leeds, 17 in Hull, 25 in Newcastle-upon-Tyne, and 34 in Glasgow. The rate in Vienna was 34 per 1000 during the week ending the 6th inst., when the mean temperature was 4·9 deg. Fahrenheit lower than in the same week in London, where the rate was 25.

THE researches of Dr. Le Fort on the subject of childbirth in the principal countries of Europe show that out of 888,312 accouchements in public hospitals and institutions, there occurred 30,594 deaths; out of 934,781 accouchements at home there were only 4405 deaths. That is to say, 1 death in 29 of the cases delivered in public institutions, and only 1 in 212 of those attended at their own homes.—*London Review.*

NOTICES TO CORRESPONDENTS.

Communications to the London Editor should be addressed to 20 King William-street, Strand; to the Edinburgh Editor, at Maclachlan and Stewart's, South Bridge; and to the Dublin Editor, at 3, Lincoln-place.

TO THE EDITOR OF THE MEDICAL PRESS AND CIRCULAR.

DEAR SIR,—Perhaps Dr. Chapman, through your journal, would kindly inform the Profession as to the length of time which is required *during* each application of the ice-bag to the spine in cases of epilepsy?

The want of this information detracts seriously from the practical value of his deeply-interesting communications.

Anxiously awaiting a reply, I remain, dear sir, very faithfully yours,

AN IRISH PHYSICIAN.

ERRATA.

The report of Dr. Darby's remarks upon cholera at the Medical Society of the College of Physicians, as it appears in our last, conveys the reverse of what he intended to express—"take any other disease that was an epidemic, scarlatina or typhus fever for example, *and if they excluded all malignant cases*," *&c., &c.* What Dr. Darby intended to say was this—"and if they excluded all the milder cases, and recorded none but the most malignant forms of these diseases, they would see what an alteration would be made in the average of mortality!"

MEDICAL VACANCIES.

Clayton Hospital—House-Surgeon.
Royal General Dispensary—Assistant-Physician.
Stepney Union—Two Medical Officers.
Windsor Royal Dispensary and Infirmary—House-Surgeon.

BOOKS, PAMPHLETS, &c., RECEIVED.

Journal de Médecine. Paris.
Registrar-General's Report.
Manchester Statistical Society Report.
Public Dead-houses.
Sussex County Lunatic Asylum Report for the Year 1866.
Westminster Review for April.
Annual Report of the Staffordshire Asylum.
The True First Stage of Consumption. By Horace Dobell, M.D.
On the Influence of Light. By Dr. Forbes Winslow.
Recherches sur l'Absorption des Médicaments faites sur l'Homme Sain. Par le Docteur Demarquay. Paris, 1867.

Births, Marriages, and Deaths.

Announcements are inserted without charge, and must in all cases be authenticated with the signature of the sender.

BIRTHS.

GRANT.—On the 28th ult., at Kinnethmont, Aberdeenshire, the wife of J. G. Grant, M.D., 48th Regiment, of a daughter.

GORDON.—On the 5th inst., Roseville, Juniper-green, Edinburgh, the wife of Dr. Gordon, of a son, still-born.

BROADBENT.—On the 10th inst., at Upper Seymour-street, Portman-square, the wife of W. H. Broadbent, M.D., of a son.

ROBERTSON.—On the 12th inst., at Parliamentary-road, Glasgow, the wife of Alex. Robertson, M.D., of a daughter, still-born.

MARRIAGES.

SABBEN—FRANCES.—On the 3rd inst., at St. Mary's, Stoke Newington, James Thompson Sabben, M.D., to Mary Frances, relict of George Birkett, M.D.

TRIMMER—NASON.—On the 9th inst., at the Church of St. Nicholas, Francis Trimmer, M.R.C.S., of Oakhampton, Devon, to Frances Elizabeth, youngest daughter of Edward Nason, Surgeon, of Nuneaton, Warwickshire.

DEATHS.

LLOYD.—On the 26th ult., at Northwood, Hanley, R. Lloyd, Surgeon, late of London, formerly of Hanley, aged 82.

ROBERTSON.—On the 30th ult., Dr. Thomas Robertson, R.N., Blackheath, aged 74.

MORRIS.—On the 8th inst., R. T. Morris, M.R.C.S.E., of Upholland, near Wigan, Lancashire, aged 51.

SIMPSON.—On the 10th inst., A. Simpson, M.D., of South-crescent, Bedford-square, formerly Surgeon, at Chattoor, Madras.

ASSLIN.—On the 11th inst., Thomas Asslin, L.R.C.P.Ed., of Colsterworth, Lincolnshire, aged 37.

BICK.—On the 12th inst., at Loddige's-road, Hackney, Alfred Bick, L.R.C.P., aged 29, deeply lamented by all who knew him.

Original Communications.

PARALYSIS: CASES ILLUSTRATIVE OF A NEW METHOD OF TREATING IT BY THE APPLICATION OF COLD OR HEAT ALONG THE SPINE.

By JOHN CHAPMAN, M.D., M.R.C.S.,
PHYSICIAN TO THE FARRINGDON GENERAL DISPENSARY.

[*Read to the Harveian Society of London, April* 4, 1867.]

THE term paralysis denotes in reality various diseases, diseases which differ alike from each other in respect to their phenomena, the parts of the nervous system in which they are seated, and the nature of the morbid condition which obtains. In fact, they differ from each other so decidedly that their only common element consists in disorder of some part of the nervous system, disorder most frequently, however, extending to the voluntary or involuntary muscles, or to both, at the same time. The morbid states of the nervous system are also due to widely different, and not seldom indeed to quite opposite, proximate causes—as, for example, anæmia, hyperæmia, congestion, inflammation, red softening, white softening, hæmorrhage into the nervous centres, pressure of tumours, tubercle, cancer, and finally, blood-poisoning—as in cases of syphilis, uræmia, plumbism, and the eating of bread containing the ergot of rye. There are also the cases of paralysis resulting from mechanical injuries, and finally the progressive paralysis of the insane. In fact, it seems to me that the nomenclature of so-called paralytic diseases is extremely defective; for at present it is customary to designate morbid states of the muscular system which are exactly opposed to each other in nature by one and the same word. The flaccidity and atrophy characteristic of the muscles in cases of wasting palsy, present a complete contrast to the rigidity and comparatively undiminished bulk of the muscles in other forms of motor paralysis scarcely less notable. It is impossible, therefore, to treat of this group of diseases, the members of which are so diverse, except by considering them separately and in detail; on the other hand, it is no less impossible within the limits assigned to this paper to accord to each member of this group special consideration. Moreover, in inviting the attention of this Society, as I am about to do, to a new method of treating paralytic affections, it seems to me that it will be most satisfactory, instead of dealing with the subject in its most generalized aspect, to offer certain concrete and detailed illustrations of the principles and method in question, for by doing so, I shall, I believe, best facilitate an adequate comprehension and due appreciation of those pathological and therapeutical doctrines which I advocate. I shall, therefore, at once ask your attention to the particulars of a

1.—*Case of Paralysis involving the muscles of the tongue, throat, back, and four extremities, and associated with giddiness, headache, profuse dribbling of saliva, constipation, and scantiness of the menses, treated chiefly by the application of cold along the spine.*

Mrs. P., aged 42, a thin, nervous, and intelligent person, married, and has a son 19 years old, was first seen by me March 30th, 1863, when I wrote the following description of her condition: She is speechless, her head falls forward on her bosom, and her four extremities are paralysed. She cannot utter any distinct articulate sound: a stranger can understand nothing, or next to nothing of what she tries to say, although those who are constantly with her can make out much of what she means. The tongue is atrophied and shrivelled; its surface is wavy or corrugated, as though not lessened in proportion to the muscular substance. The organ is very tremulous when an attempt is made to put it out, and the tip of it cannot be protruded beyond the teeth. Saliva dribbles continuously from the mouth both night and day. The patient has great difficulty in swallowing: it is with considerable effort that she swallows solids, and, when she does so, she makes a peculiar noise; she can take fluids in only very small quantities at a time, and she usually spills a part of anything she attempts to drink,—"it comes back," as her nurse says. The muscles of the face, neck, and of the whole back are extremely thin and wasted. There is often, and very distinctly, observable in the muscles of the back, that remarkable quivering characteristic of wasting palsy, and which reminds the patient's nurse, as she says, of "sheet lightning in a summer evening." The whole back is remarkably hot. The arms and hands are almost powerless: the right arm can, however, be raised until the elbow is as high as the mamma; and the left can also be raised so far as to enable the tips of the fingers to reach up as high as the eye. The whole upper extremities, but especially the forearms and hands, are extremely wasted. The common extensors of the fingers are almost wholly paralysed; the extensor indicis retains some power, but it is very weak. The extensors of the right thumb retain considerable power; those of the left are quite paralysed. The long flexor of the right thumb is absolutely powerless; there are, however, in place of the thenar eminence a few—very few—fibres by which the thumb is slightly moveable. The long flexor of the left thumb has still some power, but the short muscles on this side are wholly gone. In place of the ball of the thumb on each side there is a deep concavity. The fingers are slightly flexed, and the first phalanges being drawn backwards, the hands assume somewhat the appearance of birds' claws. The sensibility of both hands is normal. The thighs, which are slightly flexed on the trunk and powerfully adducted, are nearly immoveable, so that when the patient is seated she cannot prevent herself from slipping gradually out of her chair. The fore-part of each foot is bent downwards, and firmly fixed in that position; the left foot is also so drawn that the toes and sole turn inwards. The toes of both feet are slightly mobile; but the feet themselves cannot be moved from their abnormal positions by applying even a considerable amount of external force. The muscles of the lower extremities are not notably wasted. The patient has experienced, she says, much giddiness, especially when standing up, during the whole period of her illness, and not unfrequently suffers from headache. The appetite is much impaired; the bowels are habitually constipated; and the catamenia, though regular, are very scanty.

About three months before she became ill she fell down on her left hand, and forced the middle finger backwards, but without breaking it; she almost fainted with the pain. The finger got fairly well, but always remained very weak, the power of flexing it continuing slight. About two years and a-half ago this finger became more markedly weak, and ultimately paralysed. The paralysis then extended to the corresponding thumb, and in May, 1861, her limbs began gradually to lose power. The left arm, then the left leg, then the right arm, and then the right leg being successively involved. The quivering of the muscles began, the patient says when her illness began, and was first perceived in the legs, especially in the left thigh, then in the muscles of the back, then in both arms, and particularly in the left upper arm and the shoulders; it was next experienced on the left side of the face, then over the face generally; and, finally, as she states, in the soles of the feet. "When at the Middlesex Hospital, I felt," she says, "as if my back and legs were all alive."

She became an in-patient of Middlesex Hospital in May, 1861, she was afterwards treated at the National Hospital for the Paralysed and Epileptic, then at a dispensary, and finally by two medical men successively, who attended her at her own house.

When first prescribing for her, I ordered aperient pills to be taken occasionally at bed-time, quinine and sulphuric acid twice a-day, and requested that the shoulders, arms, back, and legs, should be rubbed vigorously as often as practicable, and that towels dipped in iced-water, and so folded lengthwise as to be about four inches broad, should be applied along the whole spine during twenty minutes, three times a-day—the towels being carefully

changed immediately they became warm. This report would become inconveniently long were I to give a detailed account of the treatment I adopted during the time the patient was under my care, I shall therefore restrict my description of it to a general statement of it as follows:—Besides the medicines just named, the only others used were calumba, citrate of iron and quinine, nitric acid, an aperient draught, and bicarbonate of potash. Galvanism was applied to the muscles—chiefly of the extremities, and was used for the first time, May 15, 1863. I also applied heat freely, by means of hot water, to the extremities; but the main treatment, and that upon which I principally depended, consisted in lowering the temperature of the spinal region, by means sometimes of iced-water, sometimes of the spinal ice-bag. The applications were, at one time, along the whole spine, at another to a part, and for different lengths of time, the variations being made according to indications observable from time to time.

Results of Treatment.—The patient showed indisputable signs of improvement within the first week of treatment, which was continued upwards of two months, during which she progressed most encouragingly. Up to the end of that time the change effected in her may be summed up as follows:—She could hold her head erect; could protrude the tip of the tongue beyond the teeth full half an inch; the dribbling of saliva quite ceased; she could speak much more distinctly; could swallow fluids without difficulty, and drink a cupful of tea or coffee at a draught without becoming choked, or spilling any of it; she could raise the right arm vertically—placing the elbow higher than the head, and the left arm so that the tips of the fingers reached as high as the top of the head; the arms increased in size,—during the first eighteen days of May the diameter of the middle of each forearm increased a quarter of an inch; and the power of each arm was correspondingly increased. Even as early as the 18th of April, she said:—"My arms are wonderfully much stronger. I can feed myself; can pull myself up, and can wipe my face, &c.," and with joyous pride showed me that she could lift a chair—a feat she could not perform the previous week. The claw-like set of the fingers disappeared. On the afternoon of Sunday, May 3rd, the patient experienced a sudden increase of power in the extensor muscles of the left forearm, where, for the first time, I could distinctly feel their contractions beneath my fingers; and the pulling and grasping power became, during the treatment, markedly greater than before. The concavities formed by the wasting of the ball of each thumb, were in no perceptible degree filled up; there was, however, a slight though decided increase of motility of each thumb, and the left flexor longus pollicis became markedly stronger, notwithstanding that the concavities just named continued. The metacarpal inter-osseous spaces of each hand were gradually filled up to a surprising extent, so much so, indeed, that her hands became quite plump. The power of flexing the thighs on the trunk and of separating them from each other gradually returned, so that instead of slipping down from her chair continually, as she had formerly done, she was able to maintain her position, and, finally, to move her thighs about freely in all directions. The feet gradually became susceptible of passive motion, and afterwards she was capable of putting both feet flat to the ground, and of moving them in different directions—outwards as well as inwards—by the mere force of her will. During the latter end of May she stood occasionally for two or three hours at a time, supporting herself sometimes only with one hand, and one day, with the help of her son, she walked into an adjoining room. The muscles of the back, with the exception of a few of the upper fibres of the trapezius, ceased to quiver, and re-acquired a very considerable development. In fact, she gained flesh generally to such an extent as to cause her nurse to complain, during the latter portion of her attendance, of the great additional weight of the patient when moving her about. This increase of flesh was even more remarkable in the face than in the rest of the body, so that, compared with what she had been, she appeared quite plump. The back became permanently much cooler than it had been; the function of the bowels healthier; the catamenia abundant;* appetite greatly improved; the head clear, and not only free from headache, but free from the great giddiness, which, up to the time when my treatment began, she had experienced during the whole period of her illness.

At the end of May pecuniary and domestic troubles which had long pressed heavily upon her reached a crisis, which exerted such a depressing influence upon her as not only to stop further progress, but actually to throw her backwards. During the long period of her illness her husband, who is a working man, had been obliged to pay some one to do the house-work and to attend on her, and having become involved in debt he now sent away the person who had done this work, and broke up his house. His wife was then taken to her relations, at her native place in the country, and I never saw her again.

It would be difficult, indeed almost impossible for me, to select a case more suitable than this to exemplify the efficacy of the therapeutical method, which consists in modifying the temperature of the spinal region; for this patient presented a combination of symptoms, each of which may be fairly regarded as a grave disease, and each of which was influenced beneficially, and to a remarkable extent: there was paralysis with flaccidity and wasting of the affected muscles; there was also paralysis with rigidity of the affected muscles; there was headache, with giddiness, especially when the patient stood up; there was profuse dribbling of saliva; there was loss of appetite; habitual and extreme constipation; and the menses were very scanty. Now it appears to me that a skilful interpretation of these various symptoms would lead to the inference, that the spinal and collateral sympathetic nervous centres were in that morbid condition, which indicated that the application of cold would exert a remedial influence. The history of the case seems to show that the disease originated by injury to the hand, that the morbid condition induced by the accident result in the transmission of a morbid influence to the spinal cord; and that this influence was diffused both along the cord, and over the sympathetic nervous centres. As might be expected, the disease was most intense in that region of the cord where it was first generated, so intense, indeed, that probably portions of the cellular constituents of that part ultimately became more or less atrophied or destroyed. Simultaneously the collateral sympathetic ganglia were kept in a state of morbid excitement by the influence of the disease in the cord, and thus exerted an excessively constringing force on the arteries under their control. In this manner, I account for the particular form of paralysis with which the muscles of the throat, neck, upper extremities, and dorsal region were affected. While, on the one hand, that healthy influence dominating the nutritive processes which is diffused from the cerebro-spinal system throughout the organism was, in respect to the parts in question, greatly diminished and probably also perverted, and while the power of transmitting motor impulses to the muscles implicated was impaired, the supply of blood to these muscles was so greatly lessened, owing to the chronic spasm of the arteries distributed to them, that it was no longer possible for them to receive adequate nourishment. The conditions here described are precisely those which are calculated to insure muscular atrophy; and, I venture to suggest, that that peculiar feature which frequently distinguishes wasting palsy, viz.,—the wasting of special groups of muscles, and groups, moreover, which are often related to each other by co-ordinate action, originates in the fact that special series of nerve cells occupying limited areas within the spinal cord, and functionally related to the group or groups of muscles implicated, are diseased, the rest of the cord remaining healthy, or at least disordered only to the extent of hyperæmia. In this case the result of the diffusion of the morbid influence down the cord and to the collateral sympathetic centres was, as it seems to me, the production in those

* They became so for the first time on May 3rd, when she said—"I feel that the change is doing me good." It was at this date that she experienced the sudden increase of power in the extensor muscles of the forearm.

parts of hyperæmia, so considerable as, by greatly intensifying their functional energy, to induce a tetanoid condition of the lower extremities: the energy of the spinal cord transmitted to them was continuously excessive, thus inducing in them a state of continuous contraction. Simultaneously the stimulus diffused from the sympathetic ganglia over the arteries of the lower extremities, so far exceeded the normal amount, as to lessen in some degree the supply of blood to the muscles, and thus insured the condition which, as is well known, is peculiarly favourable to the onset and continuance of spasm or muscular rigidity. On the other hand, while the nervous centres related to the arteries in question were so far unduly active as to produce the condition just described, they were not acting with that intense degree of morbid energy which would result in almost wholly cutting off the blood supply, and which, as stated, was the case with respect to the nervous centres related to the upper part of the body. Hence, while the muscles of that part were extremely wasted, some of them being almost wholly destroyed, the muscles of the lower extremities were not diminished to any considerable extent.

If it be admitted, as indeed it must be by all who have experience in this matter, that the cerebral blood-vessels are under the government of nerves emerging from the sympathetic within the region limited above by the fifth or sixth cervical vertebra, and below by the third or fourth dorsal, and if it be further admitted that in the case in question the sympathetic centres within this region were morbidly affected, we should be led to predict that the cerebral circulation would become disordered, and that the disorder itself would present the form of cerebral anæmia. This, in fact, was the case: there was headache, associated with feeble mental action, and frequent giddiness, especially when the patient stood up.

Seeing that there were symptoms of grave disease of the spinal cord in that region where the nerves to the upper extremities are given off, it is easily intelligible how the uppermost part of the cord, together with the medulla oblongata, would, through the propagation of the morbid influence upwards, become hyperæmic. Now the nerves which cause the parotid and submaxillary glands to pour out their appropriate secretion, are motor-nerves from the cerebro-spinal system, viz., branches of the auriculo-temporal and the chorda-tympani, and the origin of these nerves is the medulla oblongata. These facts being recognised, it will be at once seen that hyperæmia of that nervous centre is likely to result in an excessive flow of saliva; and such in fact was the case with the patient in question.

Extensive experience has taught me that an abnormally irritable state of the spinal cord and collateral sympathetic ganglia along the lower half of the dorsal region, is peculiarly conducive to functional disorders of the stomach—loss of appetite, indigestion, nausea, vomiting. And I have long been of opinion, founded on many observations, that one at least of the immediate causes of nausea is a great superabundance of mucus in the stomach, owing to the excessive stimulus transmitted from the spinal cord to the mucous glands of that organ. Assuming my diagnosis of the case under consideration to be correct, it follows that there was hyperæmia of the whole of the spinal cord, below as well as above the part first diseased, and therefore an intelligible cause of the symptom—loss of appetite; and, as I shall now proceed to show, of the extreme and habitual constipation from which the patient suffered.

If my ideas concerning the pathology of constipation be correct, it may proceed from three causes—1st, from partial atrophy of the circular muscles of the intestines; 2nd, from inadequate nervous stimulus of those muscles; 3rd, from a deficiency of intestinal mucus. Now, as I contend (and I must content myself for the present with merely stating my conviction), both the muscles and the mucous glands derive their functional energy from the spinal cord; if so, the second and third causes just named of constipation, consist in enfeeblement of that part of the cord related to the intestines. This condition is far less frequent than that of excessive spinal irritability, the result of spinal hyperæmia. It follows, therefore, that constipation due to spinal anæmia, and therefore enfeeblement, is comparatively rare. On the other hand, cases very frequently come before me, in which obstinate and habitual constipation is associated with indubitable symptoms of hyperæmia of the nervous centres along the lower dorsal region. In these cases the production of constipation is, I apprehend, as follows:—The nervous energy diffused over the mesenteric arteries being excessive and continuous, forces them into a state of chronic contraction, many of the smallest ones being often, I doubt not, closed entirely. The consequence is, that the intestinal muscles cease to be adequately nourished, and therefore, losing their wonted strength, become incapable of effecting those vigorous vermicular contractions on which the power of the alimentary tube to propel its contents with healthy force and regularity depends. It is conceivable, and indeed probable, that when, owing to chronic contractions of the mesenteric arteries, arterial blood is partially shut off from the intestinal walls, the mucous glands will receive less than their due supply, and that therefore, while those glands are being adequately stimulated to fulfil their functions, they are incapable, from want of blood, of elaborating a sufficiency of mucous; if so, two distinct causes may co-operate in producing the constipation in question. If these views be sound, we should be justified in predicting that, in the case just described, the character of the paralysis would be associated, as it was, with persistent constipation.

The last symptom to which I have to advert was scanty menstruation. Reasons have already been given for believing that the nervous centres in the lumbar region, as well as those above, were hyperæmic; and I have demonstrated by a large amount of evidence that, if the nervous centres along the lower half of the spine are rendered hyperæmic by the application of heat, the menstrual function may be retarded, lessened, arrested, and in some cases, at all events, completely suppressed. It will therefore be readily understood how the special menstrual disorder of this patient was one of the results of that general disease of the nervous system from which she suffered.

In seeking to understand the nature of things, it behoves us, as has been well said by Newton, to admit only such causes as are at once true and adequate to explain the phenomena in question. In what I have said concerning the foregoing case, I have alleged that one morbid state of varying degrees of intensity in various parts of the spinal cord and sympathetic was adequate to produce all the symptoms passed in review, and have attempted to explain, *seriatim*, the *modus operandi* of their production.

Of course, if my explanation of the proximate cause of the symptoms be correct, it follows that the most scientific method of removing that cause would consist in exercising a sedative influence on the nervous centres morbidly affected, and on no others. My treatment of the patient was the result of this reasoning, and considering how signally several other attempts to relieve her had failed, and the desperate state in which I found her, the benefit conferred is a striking testimony to the efficacy of the plan adopted. The medicines already mentioned, which were administered, played, I apprehend, a very subordinate part in the remedial process; the friction which I ordered to be applied to the wasted muscles with a view of facilitating an increase of their nutrition, as well as the galvanism which was applied chiefly to the lower extremities, probably co-operated more effectually; but my experience in many other cases enables me to state confidently, that the great improvement which was effected in this patient was mainly due to the application of cold along the spine.

2. *Case of paralysis (hemiplegia and paraplegia) associated with Epilepsy and inducing great impairment of speech, extreme incontinence of urine, excessive drowsiness during the day-time, and extraordinary coldness of the surface of the body, especially of the extremities, even in summer, treated by means of the spinal ice-bag.*

H. C., male, aged 56, suffering from paralysis and epilepsy, was first seen by me, June 11th, 1863. The patient

can stand by himself with difficulty, but cannot walk without support and the use of a stick. Both legs are equally weak; he can stand on neither alone. The toes of the left foot are turned inwards as he sits, and he cannot turn them outwards. His speech is greatly impaired, very thick and indistinct. There is hyperæsthesia on the left side of the face, where he feels two points two and a-half lines apart; on the right side he cannot feel two points until they are ten lines apart. The right arm is considerably weaker than the left. Both hands are numb, and have the feeling as of being pricked with "pins and needles." He feels two points at seven lines apart in the right palm, and at five lines apart in the left. He is extremely troubled by the need of making water with excessive frequency: at his best times he is obliged to urinate about every fifteen minutes; at his worst about every five minutes. The bowels are irregular, but generally costive, sometimes ("most weeks") they go three or four days without action. The patient sleeps well, as he says, at night and during a considerable part of each day. He complains that his head is heavy and dull, that he is "cold all over," and that he suffers especially from coldness of his hands and feet, even in the hottest weather: he sits close to the fire in summer. Pulse 76; pupils equal; sight good; tongue clean and straight.

He thinks he was quite healthy until he was twenty-five years old, when he had what he called a long "epilectic" fit, and went to the Middlesex Hospital a month. Had no other fit until he was forty years old, when he complained of a feeling (pressure) in his head, and immediately fell: he was much convulsed, and bit his tongue. He was unconscious about thirty minutes, and recovered completely. A few days afterwards, while sitting at tea, he suddenly dropped his knife, lost the use of his right arm and leg to a great extent—not completely; he also lost completely the power of speech, but did not lose his senses. He was bled in the arm, when his speech returned. He never recovered the full power of the right arm and leg. He ascribed this fit to depression of spirits, caused by losing his employment through the death of his master. In his forty-third year he had another fit lasting about half-an-hour, the hemiplegia not being increased. Had no other fit until his fifty-third year, when he had one, succeeded by increased paralysis of the right side. The hemiplegia and the fits have been gradually increasing, the latter recurring at intervals of a few months, and becoming more frequent, now occur about once a month; the last fit happened on the 19th ult. The patient is in great poverty, and wholly dependant on the labour of his wife, and the help of benevolent friends, who offer to supply him with ice during my treatment.

I ordered ice to be applied along the whole spine during two hours, five times during each twenty-four hours, and requested that the spinal ice-bag should be enclosed in flannel; I also prescribed five grains of bromide of ammonium twice a-day.

June 18.—Has had no fit, and does not feel likely to have one. His head feels better, feels lighter; "he don't feel," his wife says, "that heaviness that he did." Sleeps well at night and less in the day-time than before. Has not complained at all this week of the numbness in his hands: his wife says they are decidedly better. The weakness of the legs continues, and is, she thinks, greater than last week. The bowels have already become "very regular, once a day, and sometimes twice," since he began to use the ice. He retains his urine longer than formerly. Feels warm all over—the feet being especially warm.

25th.—No fit; he says the "head feels very well; feels clear and cool; I don't seem to have any fear of a fit;" the speech is clearer and more distinct; the sensibility on each side of the face is now equal; he feels two points at three lines apart round the angle of the mouth on each side; the right arm has decidedly gained in strength; and the sensibility of both hands has become normal; he now feels two points at four lines apart in each palm; the lower extremities are also stronger; he can now turn the left toes outwards; bowels regular; he notices a great diminution in the frequency of making water; continues constantly warm all over; to apply the ice as last ordered four times a day instead of five, and to continue the bromide of ammonium.

July 2nd.—No fit; sleeps well at night, but *much less* in the day time than he used to do; bowels regular. He now makes water about four times during the night, and six during the day. To apply ice as before three times a day instead of four, and to enclose the spinal ice-bag in a thick worsted stocking instead of in flannel as before. ℞ Quinæ Desulphatiss, gr i.; Acidi Sulphurici diluti, ℥ vii. bis die.

9th.—No fit; no headache; feels himself "as well as possible, but very hot—very hot;" his speech is greatly improved; his mind also; the mental improvement is clearly expressed in his face, which is lighter and more intelligent; sleeps "capital" at night, still less during the day; feels no numbness whatever of the hands and no sensations as of "pins and needles;" can still evert the left foot, and can now stand on each leg, but especially on the left one; he can also now walk alone; bowels regular; power of containing the urine continues to increase; now passes it about four times in the day and four times in the night. To apply ice twice daily, in three folds of worsted, and to continue the medicine as before.

16th.—No fit. Reports himself still better. His wife says "he does not sleep in the day like he used to do, and sleeps very well of a night." He talks still more clearly. Retains his water still better, getting up only twice, or at most three times during the night. He can now sometimes walk very well, even without the aid of a stick. To continue as last ordered.

23rd.—Has had no fit, but has just fallen, having been pulled down by his wife in her attempt to get him out of the way of a carriage, after getting out of an omnibus. He is shaken by the fall, and complained for a short time of headache afterwards. Otherwise is in all respects the same as last week. Treatment same as before.

30th.—Still no fit, notwithstanding the fall and fright last week. Yesterday, for a short time, the right hand became "rather shaky" and numb: the numbness lasted about half an hour; the shakiness a good part of the afternoon. He was quite well again in the evening. His head remained quite unaffected. The improvement of the bowels and bladder continues. To apply ice during two hours three times a day; the bag being enclosed in one fold of flannel. ℞ Potassi Iodidi gr. ii½, Ammonii Bromidii gr. v, ex aquæ ter die.

August 6th.—Continues without a fit or other bad symptom. To persist in the treatment last ordered.

September 9th.—Had a fit on the 30th ult. at 5·30 A.M. His wife says she believes "its worry that brought it on." She states that he had ice each day until the fit, but none afterwards. *Since he left off the ice he has become cold again.*

A careful consideration of the symptoms of this case, apart even from its history, can carcely fail to lead to the conclusion that the paralysis of the extremities, the dull heavy headache, the defective speech, the disordered sensibility evinced by the cheeks and hands, the grave functional disease of the bowels and bladder, the excessive somnolency, and remarkable coldness of the surface of the body, are all referrible to excessive hyperæmia, merging into congestion of both the spinal cord and the sympathetic nervous system. According to my reading of the case, there was considerable congestion of the spinal cord, resulting in the paralysis of the lower extremities, and co-operating to produce the disordered sensibility especially evinced in the face and hands, as well as the extreme functional derangements of the bowels and bladder. On the other hand, the vascular condition of the sympathetic ganglia was rather one of extreme hyperæmia than of congestion, hence their preternaturally vigorous action which resulted in such vehement arterial contractions throughout the system as to deprive the brain, as well as the periphery of the body generally, of its due supply of blood. The consequence was, the mental heaviness and extraordinary somnolency and the excessive coldness which the patient ex-

Fig 1

Fig 2

Fig. 3

Fig 4

perienced. Moreover, other of the symptoms were not less certainly, though less obviously, due to the same cause; the anæsthesia or numbness, and the sensations as of being pricked by "pins and needles," though partly referrible to congestion of the medulla oblongata and spinal cord, were also, I have reason to believe, in a great measure due to the excessive action of the sympathetic, which, lessening the supply of blood to the parts affected, prevented that complete nutrition and oxydation of the nervous constituents of the tissues of those parts which are essential conditions of normal feeling. The same cause resulted in the starvation of the muscles of the bowels, and, probably, of those of the bladder. Hence, according to the explanation already given, the peristaltic energy of the bowels was impaired; and hence, probably, the muscular coat of the bladder, being also weakened, became abnormally irritable in accordance with the well-established fact that badly-nourished, weakly muscles are most excitable.

Assuming this pathological view of the case, it is obvious that no treatment of it was calculated to prove so beneficial as that which was capable of abolishing at once the hyperæmia and congestion of the spinal cord and sympathetic; and as the case was one of many years standing, and therefore presenting, probably, extreme dilatation of the blood-vessels of the nervous centres in question, I ordered the prolonged use of the spinal ice-bag each day in the first instance, in order the more effectually to remedy the morbid condition in question, and, at the same time, to prevent the possibility of reaction.

It is extremely to be regretted that this patient was not enabled to continue providing himself with ice for a much longer period than that during which my treatment of him lasted; for had the blood-vessels of the nervous centres acted upon been kept vigorously contracted to their normal diameters during an adequately long period—say probably six months, I have reason to believe the patient would have derived greater, and more lasting benefit than was actually conferred upon him. It will be admitted, however, that the case as it stands, is an extremely interesting and instructive one, inasmuch as it affords the most decisive proofs of the truth of those pathological and therapeutical doctrines, which I have propounded. Within the space of five weeks, the right arm of the patient became much stronger; he was enabled to walk alone, even without the aid of a stick, to evert the left foot, and to speak very much more distinctly; his intelligence and mental expression were greatly improved; the numbness and other disorders of sensations, as well as his headache and drowsiness in the day time, vanished; he became not only warm all over but "very hot;" his bowels were opened daily; his power of retaining his water so increased that he was obliged to get up only twice, or at most thrice, during the night; and, finally, whereas before treatment he had an epileptic fit about every month, one did not occur until nearly three months after the treatment began.

The fact that the patient became cold again after leaving off the spinal ice-bag is both interesting and instructive: the chronically contracted arteries were dilated to their normal volumes by the treatment adopted, but not being under its influence sufficiently long to enable the newly re-acquired increase of their diameters to become established as a physiological habit, they contracted again when the spinal ice-bag was no longer applied, and hence the patient again became cold.

(To be continued.)

REMOVAL OF AN ENORMOUS OSSIFIED ENCHONDROMA FROM THE FACE.

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EARLY in the present year I was consulted by a gentleman, well-known in this city, with reference to a tumour, which produced much deformity of the left side of his face. This gentleman is somewhat under fifty years of age; is of active habits, and has always enjoyed excellent general health. The history which he gave me of the gradual development of his tumour was to the following effect:—

"The first indication of the tumour on my face was a slight hard swelling on the gum just by my front teeth (left incisors), which I noticed when I was probably twelve or fourteen years of age. Since that period the swelling continued to grow steadily, but almost imperceptibly, until within the last three or four years, when it developed itself with singular rapidity, and attained such formidable proportions, that I became anxious for its removal.

"Ever since the first appearance of the tumour it was carefully watched by Mr. Adams, and frequently examined (at his request) by almost every eminent surgeon in Dublin, including the late Sir Philip Crampton, Mr. Carmichael, Mr. Cusack, Mr. Colles, Mr. Maclean, the eminent dentist, and others.

"The general opinion at that period seemed to be against an operation, on the ground that there was nothing malignant in the growth; that it never would be otherwise than harmless, and because some, including Mr. Cusack, thought ten or twelve years since that it had ceased to grow. However that may be, the fact is now undeniable that within the last ten or twelve years it has increased more than in all the previous periods.

"Some years before Sir P. Crampton's death, Mr. Adams, Mr. J. Smyly, and I were with him in Merrion-square, and he then made a puncture from the inside of the nostril into the interior of the tumour, and inserting a small tube, got out a trifling quantity of fluid, not more than a drop or two. He first endeavoured to bore through the gum, but failed, apparently from the solidity of the bone. About the same time Mr. Maclean extracted a tooth near the front (left canine), and then made some ineffectual examination with a probe, or some such instrument. I did not feel the extraction of this tooth. I may add I was always deficient by a tooth on this side. The sight of my left eye left me very gradually. It evidently went as the tumour extended, and about fifteen years ago it became completely extinct."

To this simple history of the growth I have only to add a few particulars. In the first place the tumour from the very outset was always firm and hard to the touch, showing that, at least its covering was bony; further, there was no pain either in the tumour itself or resulting from its pressure during the greater part of its progress; even the loss of the eye was so gradual as to be painless, any sensation amounting only to uneasiness. Within the last two years the tumour had grown rapidly forwards, and had distended the soft parts of the cheek; browache, with shooting pains of a dull nature were felt rather constantly during that period. Hearing on that side also became somewhat dull. The pressure on the left nasal cavity made it quite impervious. Breathing was impossible through the left nostril, nor could air be forced through it to any appreciable amount. The sense of smell was necessarily in abeyance as regards this side. Even the other nostril participated in the inconvenience, so that when the gentleman was in a warm, dry atmosphere, his comfort was much impaired by reason of a dryness and stuffiness in the nasal passages, and the immediate occurrence of ache in the frontal sinus.

Placing the patient almost in profile, and looking at him from the right side, as in the position shown in Plate I., it was observed that the tumour projected in an even curve from the floor of the orbit to the mouth, so that the prominence of the tumour extended a full inch beyond the outline of the nose. The two nostrils looked directly towards the observer, so great was the distortion of the nose. The left nostril was somewhat dilated. The outlines of the mouth were much altered, owing to the left side of the mouth being depressed, and the left side of the upper lip much distended over the lower part of the tumour. The lower lip and upper part of the chin were thrown deeply

into shadow, and also somewhat out of drawing. Upon reversing the position, as in No. 2, the great prominence of the tumour came fully into view. It occupied the whole region of the cheek, and bore upon its surface evidence of two distinct epochs of growth. If a line be drawn from the inner angle of the left eye to the angle of the lower jaw on the same side, two distinct types of growth will be noticed, the one occupying the face above, and to the outer side; the other below and internally. I shall take the former first, as it represents what, for want of a better term, I may call the more chronic condition of the tumour. We observe here a distinct elevation of the floor-line of the orbit—this is not due merely to an elevation or pushing up of the lower eyelid or other soft parts; the finger and even the eye could detect that the bony ridge itself was higher than that on the right, otherwise the bone in this spot was not altered in texture or outline—it was simply pushed upwards. On the outer side the junction of the maxillary and malar bones is prominently seen; the bones here were expanded, but the body of the malar was not altered in size—it was plain, therefore, that the disease was limited in that direction. Altogether, then, it appeared evident that there was no present active extension of the growth above or outside the line I have imagined to be drawn from the inner angle of the eye to the angle of the jaw. Within this line matters were far different. Reaching high up on the nose, almost to the angle of the eye, and to the central line, a rounded mass of bony hardness, was formed. On the inner side it passed down as far as the lower margin of the ala nasi, where it was joined by a second mass which reached far down into the mouth, and which bore upon its buccal extremity two incisor teeth. Passing outwards these two portions, separated by a fissure on their nasal aspect, became consolidated together, and formed by their union a mass of great size, still rounded in outline, and of firm inelastic nature. The growth pushed the nose out of the mesial line to an extreme degree, and extended outwards and forwards, so as to distend the soft coverings of the cheek to a huge extent. On opening the mouth it was found to have extended backwards to the palate bone, and to have pushed down the palate process of the maxillary even to a greater degree than it had pushed up the floor of the orbit. Along the alveolar ridge it had grown to a greater degree than at any other part, except towards the nose. It was evident that its progress in these directions was fast reaching the utmost limits compatible with any approach to comfort, and that a little more increase would soon threaten existence. This extension downwards, and threatened extension backwards, was likely to lead sooner or later to the filling up of the cavity of the mouth. In Hey's works will be found the drawing of such a case, where the tumour developed in this direction to an enormous amount. As it was now clear that an operation was unavoidable, I arranged to meet, in consultation, Mr. Adams and Sir William Wilde. After careful examination, and a prolonged discussion, a plan of operation was agreed to, which offered the prospect of removing all the active portion of the growth with as little interference as possible with the function of speech. The gentleman's occupation rendered this proviso essential. I was under the impression that this latter object might be attained by simply preserving the muco-periosteal coverings of the palate plate and palate bone, but in this I was overruled, and I finally resolved to attempt to preserve a thin layer of bone along with the periosteum in this locality. Before the details of the operation were conclusively arranged the eye was carefully examined by Mr. Wilson, who reported that there was hopeless disorganization of the vitreous humour, and displacement of the retina to such an extent as to show that no operation could restore sight. Blindness, in fact, resulted from the remoter effects of pressure, so that the removal of that pressure could not now restore vision. Mr. L'Estrange also examined the palate for me, and came to the conclusion that the layer of bone immediately above the periosteum was sound, and that it might safely be retained.

All things being arranged, the operation was performed, on the 7th February, in the theatre of the Meath Hospital, in presence of a very large concourse of surgeons and students. This was due not so much to the severity of the expected operation, as to the personal popularity of the patient, who is extensively known and highly respected as a citizen of Dublin. Chloroform was administered throughout by Professor Macnamara, and during the long and tedious operation, the patient only once became for an instant partially conscious. When I state that the removal of the body of the tumour occupied twenty-seven minutes, and that during nearly half of that time I was engaged at the palate, this result was highly satisfactory.

The patient was laid upon an operating table which admitted of his head being raised to any required degree. I stood in front and to the left side, Mr. Porter close beside me, and Mr. Smyly opposite to him. I have to acknowledge most gratefully the unwearied assistance they gave me during the progress of this most trying operation. My other colleagues, Mr. Wharton and Mr. Stokes, also rendered valuable aid, and Mr. Adams and Sir William Wilde, were close at hand to assist in carrying out the plan we had agreed upon. As a preliminary step Mr. L'Estrange extracted the two incisors and a biscupid which alone remained on that side of the jaw. I then plunged a trochar into the tumour above and parallel to the palate, with the two-fold object of ascertaining the density of the bone and of making room for a strong metacarpal saw. The bone was dense enough, but not so dense as to make it hopeless to work the saw. By slow degrees a layer of bone was separated from the floor of the tumour, partly by sawing and partly by the elevator—once it was necessary to use a chisel and mallet to free the saw. I tried two or three saws, but discarded all for the simple straight metacarpal saw. Having effectually separated this layer of bone from the floor of the mouth, I made a vertical incision from the inner angle of the eye to the ala nasi, skirting the attachment of the cartilage, and continued it down through the lip along the curved ridge which separates the outer portion of the lip from the filtrum or central part. I followed this line in preference to a straight cut, either vertically from the ala nasi or in the mesial line; and for this reason, that the subsequent contraction of the cicatrix in these lines leaves a more ugly pucker than when it follows the line of the natural ridge. By the help of Langenbeck's instruments the periosteum of the tumour was easily detached and turned aside along with the skin and muscles of the cheek. These being held strongly aside by my two chief assistants, I divided the malo-maxillary symphysis by a strong bone forceps. In the same manner the frontal process of the maxillary was divided, the periosteum peeling off with even greater ease, so that I was able to push it and the nose completely to one side. I now, with the bone forceps, divided the attachment of one maxillary bone to the other as near the mesial line as possible. Thus the tumour was detached on three sides. There remained the difficult task of sawing through the connexions of the tumour with the floor of the orbit. The bone was here dense as ivory, and the labour of sawing through it was severe and prolonged. At length, however, after breaking one saw this was completed, and the posterior attachments of the tumour alone remained; powerful traction by the lion-forceps caused these to yield, and a large mass was removed. Above and behind it some of the less dense portions of the tumour still lay; these were scooped out with the gouge, until all was removed which showed the least deviation from soundness. The large piece weighed over four ounces; and as I removed upwards of an ounce of smaller fragments, the weight of all fell little short of six ounces. This will give some idea of its size. A couple of small vessels required ligature; and three which bled freely from the surface of the bone, and which could not be ligatured, were stopped by platina wire, heated to a white heat by a galvanic current. The battery for this purpose was kindly brought by Dr. Bennett. I found it both simple and effectual. All active hæmorrhage being thus checked, I plugged the cavity with some half dozen

small pledgets of lint, tightly rolled and fastened to cords which were allowed to hang out of one corner of the wound. The soft parts in the mouth were first brought together by numerous points of interrupted suture, horse hair being used for the purpose. In a like manner the wound in the lip and cheek were closed. Two points were left for the escape of pus, and the withdrawal of the plugs and ligatures; one point corresponded to the former situation of the incisor teeth, and the other to the groove beside the ala nasi. With these exceptions the entire track of the wound was brought accurately in contact; no external dressings were applied. The patient bore the operation remarkably well; his pulse was 70 at its close, and very good in quality; he woke up quickly from the chloroform, and had no sickness of stomach. On being removed to bed he was ordered thirty drops of Battley's sedative, and as much ice as he might wish for.

3 P.M.—He had slept well since 12; pulse 72, and full. There is a little sanious oozing only. He is suffering a good deal of pain, but feels inclined to sleep again. He expresses a wish for some beef-tea, which was ordered; also to have tea whenever he wished, and ice. Iced water applied to the face.

8 P.M.—Pulse 92, full and strong—no further sanious oozing, but some discharge of saliva; he has slight nausea, attributed by himself, and rightly, to his having swallowed some blood during the operation. Ice, which relieves this sickness, to be continued. He passed water freely. The upper lip is swelling fast, and there is a good deal of pain about the orbit. To have ice or whey through the night.

10·30 P.M.—Pulse 90—sleeping calmly.

Feb. 8th, 1·30 A.M.—Has slept quietly for periods of ten minutes—the lip a good deal swelled—he continued to sleep off, and on, until 4 A.M., when his stomach rejected the whey; his feet became cold, and he had a slight rigor for about five minutes. Mr. Sibthorpe, who sat up with him, put a hot jar to his feet, gave him ice, and a draught, with twenty-five drops of chlorodine, and two grains of quinine, in camphor mixture; this had the desired effect; he slept quietly until 8 A.M., and had no return of sickness or rigor.

At 9 A.M. his pulse was 100, full and strong; at 10·30 I found his face a good deal swelled, especially about the lower part of the cheek. The eyelids were much ecchymosed, but could still be opened voluntarily. He made no complaint of pain, only of discomfort from the swelling, and from lying on his back. I allowed him to turn on his right side. As the bowels had not been moved, I ordered three grains of calomel, with one of quinine, and one of extract of hyoscyamus; these were taken at once, and operated in the course of the day freely, but not excessively.

At 2 P.M. his pulse was 96, and less full. He had beef-tea through the day.

5 P.M.—Stomach again slightly sick—ordered a gargle of permanganate of potash to clean the mouth. Ice as before.

His pulse went up to 100 in the evening, and remained at that rate through the night. He slept well, waking but seldom, and in the morning of the 9th his pulse was again at 96, but much less full and strong. The bowels were again moved.

At 10·30 I removed, one after another, all the plugs and the two ligatures, pulling them through the aperture left in the mouth for the purpose. There was no consecutive hemorrhage, and very little fetor; the discharge which accompanied the plugs was moderate in quantity. I syringed the cavity with tepid water, to which I had added spirit of ammonia in the proportion of a drachm to the pint. He had no headache, and was inclined to eat. Ordered—beef-tea, some light claret, and a mixture containing chlorate of potash.

3 P.M.—Pulse ran up to 120; wine stopped.

7 P.M.—Pulse down again to 96—no further signs of feverishness; has slept.

Feb. 10.—Very moderate discharge of pus from the cavity through the mouth. The discharge from the nasal cavity, which, it will be remembered, was not opened in the operation, is simply viscid mucus. The swelling is already diminishing. Pulse 90.

Feb. 12.—Sitting up in the bed for some hours—able to eat a mutton-chop cut small—going on most satisfactory. The sutures in the lip removed. This portion had healed with little mark.

Feb. 15.—Daily improving; swelling much abated; appetite and sleep good; pulse 76. The greater number of the sutures were removed from the external part of the wound. All has healed by first intention, except a spot at the ala nasi, which is purposely left open for the convenience of syringing out the cavity; this is done once a-day; the discharge is not profuse; allowed to sit up for half an hour to-day (ninth day). Already some power is returning in the muscles of the cheek; the levator anguli oris is especially under the control of the will.

From this date to the 25th, when he left the hospital, he continued steadily to improve. In fact, he could scarcely be said to have had a serious symptom from the first. The slight rigor in the course of the first twenty-four hours was evidently due to his having swallowed some blood. This, slight as it was, formed the only check in the even progress of the case, while he remained in hospital. Subsequently to his return home he suffered from a small anthrax on the back of the neck; this, however, yielded to the mild, yet effectual treatment by pressure, which I have now for six years uniformly adopted, and with unvarying success, in every phase and variety of anthrax. I may here state incidentally that since I adopted treatment by pressure, or support, I have never met with an anthrax in which the disease continued to spread after the strapping was once properly applied; and I believe I have met with them in almost every possible stage and locality. In some rare cases of utterly broken down diabetics it may possibly fail to stop the gangrenous inflammation of the fascia, areolar tissue, and skin; but I presume that in such cases the knife would be equally ineffectual as a remedy. Even in such cases the combined action of the opium and of pressure would probably check, if it could not entirely control, the destruction of tissue. Plates III. and IV. show the appearance of this gentleman about the middle of March, six weeks after the operation was performed. Since then he has still further improved. The œdema of the nose and lower part of the cheek has subsided still further, and the cicatrix is less remarkable. The cavity is now closed, and there is no discharge from it. Power is returning to the muscles of the face.

As regards the structure of the tumour, it had probably been an enchondroma at first, but as years advanced it ossified, beginning from the centre. It was composed of consecutive layers, and the outer layers were probably the most recent, as they contained some fragments of imperfect or degenerate cartilage. The outside layer of all was made up of a bony case, derived from the proper tissue of the spongy bones and walls of the antrum. Under the microscope the bony plates differed little from ordinary bone; they were a little less regular as regards the arrangement of the blood-vessels.

As regards prognosis, this may be said, that the tumour grew slowly, and had a tendency to become inert in its older parts by a process of ossification. Like the Autumn leaf, its vessels and cells became gradually filled or narrowed by increasing deposits of earthy material, and less and less capable of active growth. We may, therefore, fairly hope that as we have removed all the active parts of the growth there will be no reproduction of the disease from the hard, bony floor of the orbit. Already the margin where the saw was used has fined down and rounded away. The huge cavity has been filled with soft granulations, which at first caused the cheek to bulge forward a little; with the natural contraction and consolidation of these soft granulations the cheek has gradually fallen into its proper level, and neither by touch nor in any other way can I detect any essential difference between the two cheeks. I have, therefore, good reason to hope that this tumour, which took thirty-five years to grow, may never be reproduced.

The patient may reasonably look forward to a long life, free from the distress and deformity which this enormous growth formerly gave rise to.

I cannot conclude this rather lengthened detail without a word of thanks to the many friends, professional and others, who evinced an unusual interest in the progress of this case. Next to those who personally assisted in the operation, my especial thanks are due to the resident pupils of the hospital, Messrs. Russell and Tredennick, and to my apprentices, Messrs. Scott and Sibthorpe, all of whom watched the case, and noted the particulars for me almost from hour to hour. Nor can I omit to add that the quiet determination and great patience of the gentleman himself tended very much to his freedom from dangerous symptoms, and to his rapid recovery.

AN ACCOUNT OF A REMARKABLE CASE IN WHICH DARK CUTANEOUS DISCOLOURATION OCCURRED SHORTLY AFTER DEATH:

WITH OBSERVATIONS ON ITS SUPPOSED CONNECTION WITH THE MORBID PHENOMENA RECENTLY KNOWN IN DUBLIN AS "BLACK DEATH."

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On Tuesday, the 19th of March, 1867, I was called in to see a young lady, aged 20 years, and unmarried. She resided in one of the best suburban streets of Dublin, was endowed with considerable personal attractions and accomplishments, had been more or less "of a nervous habit," as the phrase is; but, as to her general health, while never very strong, yet she had always been free from serious disease, and rarely troubled the doctor. On the preceding Saturday, one of the severe snowy days which the Siberian spring of 1867 brought us, she had gone to a friend's house, and while there had fainted. This was traceable to the fact that the catamenia, which with her were habitually regular, had been delayed a day or two beyond the proper time. At, or immediately after, this fainting fit, they came on, and presented nothing worthy of remark, but she felt weakened and knocked-up by the fainting, and so was in bed when I first saw her, three days after this had happened. I did not find anything serious the matter at this visit, and, beyond enjoining rest in bed, keeping the feet warm, using effervescing drinks of lemon-juice and alkali, and some purgative medicine to relieve constipation, with which then, as at other times, she was troubled, I adopted no active measures, as they were not needed. I need not continue a daily detail of symptoms, but it may suffice to say that very soon she showed most of the symptoms of acute, or, more correctly, *sub-acute* gastritis. Nothing remained on her stomach, and it was very difficult to hit on something which could be retained. The matter vomited was for a while biliary, and then green; there was no pain complained of over the stomach, but she frequently complained of a headache, which seemed to be more or less continuous and frontal. There was no intolerance whatever to light; the urine (though not tested) presented nothing abnormal; the pulse throughout her illness averaged from 76 to 84; the tongue was red at the edges, with intermitting patches of white in the centre; it was moist throughout, except for part of one day, when it was dry and brown; the skin was acting throughout the greatest part of her illness, and the only other symptom which appears worthy of note was the frequent complaints which she made of weary pains everywhere, but particularly in her limbs and back. After various trials of other articles of food, it was found that she could keep on her stomach Bass's bitter ale and chicken jelly. On these articles she was fed for days, with claret occasionally, and now and then a little brandy and water. Ice was freely used, both by itself in the mouth, and in everything she took. As to medicine, she had an occasional purgative, at first by the mouth, and afterwards by enema. She also took for days together, with more or less intermission, two minims of dilute hydrocyanic acid, with three grains of bicarbonate of soda in water every three hours, and oftener when necessary. She had laudanum soaked in a linen cloth applied to the stomach, and afterwards a poultice with four grains of opium in it applied in the same manner.

By steady perseverance in this mode of treatment she gradually got better and better every day. The vomiting became at first less in quantity, then less frequent, and finally disappeared. For parts of two or three days she had left her bed and lain on a sofa in the bedroom, and once she had gone down stairs in the evening. While the gastric symptoms were thus disappearing, she complained frequently of a cough. At first I thought this to be hysterical, but as it continued I examined the chest, and, finding some signs of irritation at the lower and back part of the right lung, I had turpentine stupes applied to it frequently, and so this symptom also abated, but not without disturbing the stomach a few times. Occasionally would come a fit of coughing, which sometimes resulted in forcing up the contents of the stomach. When this occurred, however (and I saw it myself), there was no morbid matter whatever discharged, but simply the food or drink which she had been taking a short time before. It differed thus from the gastric vomiting first noted, and was in fact put a total stop to by the application of a sinapism to the stomach. I may here add that she was nursed with the greatest care and good sense throughout her illness.

On Thursday the 28th March, was sent for to see her, in the afternoon, having visited her a few hours before, and found her friends in the greatest alarm about her condition. She had complained of what they conceived to be paralysis, a feeling of numbness creeping up the left side of the body to the top of the head, and including the limbs. As I could not be found when wanted for this emergency, Dr. Powell, of Upper Leeson-street, to whom an account of these symptoms was given by one of her sisters, sent her a mixture containing sal volatile and chloric æther., the administration of which completely disposed of the symptoms already detailed, so that when I arrived soon after, there was no appearance of them whatever. For some time from this date the patient manifested various symptoms which I looked on as hysterical. There was the occasional rejection of the contents of the stomach which was stopped as before mentioned, this vomiting largely depending on the power of volition; for I found that as a rule, such things as I myself gave the patient, requesting her at the same time to retain them, were for the most part retained; while the rejection of food generally took place in my absence. The mere fact of touching her limbs as she lay inclined to the left side, seemed to occasion her acute pain, unless reasoned with; so also with the power of swallowing, of opening the mouth, of moving the head, which latterly became drawn to the left side, and of other movements which were plainly under the control of volition. She had convulsive movements also; threw the arms about; felt the weight of the bed clothes, and pulled them partly down; kept grasping some imaginary objects with the hands, and occasionally putting the hand to the throat as indicative of a sense of suffocation. Then there was occasional delirium, out of which she was easily roused by me, even when she could not be roused by her own friends; there was constipation removed by enemata of tincture of assafœtida, which also modified—or after which were also modified—several of the symptoms just mentioned. The urine at first passed naturally, then was suppressed, but came away copiously and involuntarily after stuping the pubic region with hot water.

The skin was of normal temperature, with occasional diaphoresis, and the general tranquility of the circulation was specially worthy of note. The headache was not at all complained of as at first, and complaints respecting it soon ceased; sleeplessness was more or less complained of; nourishment and suitable support were continuously given, and with invariably good effect on the cutaneous and circulatory systems. There was a total absence of convulsive movements of the muscles of the face; the pupils were not dilated; there was no morbid appearance on the skin,

which was then, as in health, remarkably fair. On Sunday evening the 31st of March, I found that she had passed a sleepless day, and that the delirium could not be interrupted as before, though after a few attempts I succeeded in making her recognise me and address me by name. I gave her a dram of tincture of hyoscyamus in some sherry, (for now she retained every thing on her stomach), and also a variety of nourishment, all of which she took from my hand without demur or difficulty. On the next morning (1st of April) having found that she had passed a sleepless night with more or less noisy delirium and resistance to her being in any way moved in the bed; I poured a considerable quantity of cold water over her head; and this had the effect of making her quiet almost at once, and any weakness or depression caused by it was soon remedied by external heat and internal stimulants, which acted on the circulation as soon as given; the general result being that the pulse fell from 120 to 84, in about fifteen minutes; and though now weak and again comparatively strong, it kept pretty steadily to this number throughout the day. I now observed her pupils to be somewhat dilated, but not remarkably so, and this was while she lay with her back to the light. In the course of the day I had the advantage of a consultation with Dr. Churchill, who saw the case with me. The hydrocyanic acid was desired to be continued, with the addition of a little of Batley's sedative drop, twenty-five drops of which were ordered to be given at night; also a blister to the neck, and suitable support and nourishment. At night I myself gave her the sleeping draught, which she took and retained, and which, the nurse informed me, soon sent her to sleep, but only for a short time. The blister also rose well. The circulation was kept up, and urine had been copiously passed through the day. The skin was also soft, but when I last saw her alive, she was not perspiring. I was knocked up at 4 A.M. on the 2nd of April, and on arriving at the house found that she had been dead about an hour. From Dr. Powell, of Upper Leeson-street, who had been sent for, I learned that soon after three A.M., he came and found her grasping at her throat, unconscious, and dying. As she had trismus which would not yield, he could not give any restorative by the mouth, but administered strong solution of ammonia to the nostrils, and put a sinapism to the throat. This plan caused a temporary, but momentary reaction; and so the patient ceased to breathe. A post-mortem examination was not obtainable, and as I was aware of the existence of cerebro-spinal arachnitis in Dublin at present, and as, in consultation with Dr. Churchill, the masked and complicated nature of the case had been mentioned in connection with the possible existence or supervention of that affection, I resolved to obtain such post-mortem information as I could get by viewing the remains. Accordingly, when I saw the body at 4.30 A.M., it was perfectly unmarked by any discolouration. About mid-day, I was not surprised to hear, in answer to my query, that it had soon after death turned black, or dark purple, to a large extent—the face, hands, legs, but not the feet, and all the back parts, from the neck downwards, being so affected. I went up and saw it, and perceived that this colour had disappeared from some of these places, particularly from the front of the face, but it yet remained on others. The hands were convulsively closed, and could not be straightened, the right foot was convulsively inverted, and the eyelids could be kept closed only with difficulty. The abdomen was enormously swollen, and black blood in quantities had been largely pouring from the mouth, and continued so to pour all day, so that the body had to be put into a coffin that evening. With this there was a most offensive smell of decomposing animal matter. Late that night, some time after the body had been laid in the coffin, a convulsive movement of the abdomen took place, somewhat resembling vomiting, and was followed by the ejection from the mouth of a quantity of black bloody matter, with a smell which no perfume, and not even chloride of lime, could cover or dispel. Next day the face had become covered with purpuric spots, and had so swollen, that it could not be easily recognised, and so thorough and rapid was the decomposition, that the coffin had to be closed. I never before saw a case in which the human face became so quickly decomposed, and literally "dissolved;" and it was the more remarkable, as it was one of unusual comeliness, which, throughout an illness ranging over about eighteen days, had not exhibited even the ordinary changes which the countenance undergoes in disease. What was the immediate cause of death in this case? Probably cerebro-spinal arachnitis, or, more correctly, cerebro-spinal *meningitis;* for, to assert that the arachnoid membrane was chiefly or solely affected, would be to assume what could only be decided by the pathological evidence afforded by a post-mortem examination.

In the well-known paper which the late Dr. Mayne published on "Cerebro-spinal Arachnitis," in the *Dublin Quarterly Journal* for August, 1846, that eminent physician stated his opinion, that the disease which fell under his observation at that time, consisted "essentially in acute inflammation of the membranes which invest the brain and spinal marrow;" and he further observed that "the arachnoid seems to be its especial seat;" that "the *spinal* arachnoid always suffers much more severely than the cerebral;" and that "the substance of the brain and spinal marrow appeared remarkably free from lesion; there was no unusual vascularity or softening apparent, nor did the ventricles betray any evidence of inflammation." Dr. Mayne's description of the symptoms is so concise, and differs so materially from that observed in this case, that I have no hesitation in giving it entire. After stating their formidable nature, and the sudden and unexpected accession of the disease, he proceeds thus:—"In the majority of cases the patient has been in his ordinary health and spirits up to the very moment of the seizure, and has experienced no premonitory symptoms to warn him of his danger. . . . In many instances it commences with severe pain in the abdomen, followed immediately by vomiting, and not unfrequently by purging. In the worst cases these symptoms are accompanied by marked collapse, the extremities are cold and blueish, the pulse at this time is a mere thread, and altogether the disease assumes very much the aspect of cholera. After the lapse of a few hours, reaction, more or less perfect, ensues; the muscular system then presents characters which may be considered almost pathognomonic. The muscles of the extremities, and those of the neck in particular, become remarkably rigid; the head is drawn back upon the vertebral column, and firmly fixed in that unnatural position; no efforts of the patient can bend it forward, neither can the attendants do so, at least by the employment of any justifiable force. The countenance at this period often assumes very much the tetanic expression; twitchings of the muscles of the face sometimes ensue; the patient loses, in a great measure, the power of moving his extremities, so that he is quite unable to assume the erect position; the surface becomes hot; the pulse full and frequent (from 120 to 140); the stomach often continues irritable, whilst an insatiable thirst torments the sufferer; and the epigastrium evinces marked tenderness upon pressure. Symptoms of a still more distressing nature quickly supervene. The patient may be seized with general convulsions of frightful severity, requiring personal restraint to protect him from injury; or he may lie in a semi-comatose condition, constantly moaning and grinding his teeth, or even crying incessantly. Towards the close of his sufferings he generally merges into perfect coma, the pulse becomes slow and laboured, the powers of speech and deglutition fail, his stools are passed involuntary, and death finally closes the scene. All this may occur in a surprisingly short space of time; some of the cases ran their course in forty-eight hours, and the greater number terminated about the fourth day, whilst some few were prolonged over a fortnight or three weeks. Examples are on record of death from the disease in so short a period as fifteen hours." Dr. Mayne then further remarked, that while in some cases symptoms indicative of mischief within the cranium were observed—such as pain in the head, heat of scalp, congestion of the conjunctiva, strabismus, intolerance of light

&c., yet, in many, no such evidence occurred. He also remarked (following Dr. M'Dowel) that in some cases the patients were sore all over, and winced on the least touch, refusing to change their posture in bed from the pain consequent on the slightest movement; "but far more frequently a diminution of tactile sensibility and confirmed stupor have afforded grounds for the worst anticipations." Irregular and laboured respiration, in the absence of thoracic disease, was also noticed by Dr. Mayne "as a leading symptom;" and in two cases in which he made a post-mortem examination he "found the abdominal viscera absolutely healthy," nothwithstanding that decided gastric symptoms "persisted in a very marked manner to the close."

In The Medical Press and Circular for 16th May, 1866, were published details of a case of what was then called "Black Death," which had recently occurred in the practice of Dr. Lyons of this city. A reference to the report of that case will show that it had some remarkable features in common with, and some differing very widely from, those observed in this case. In Dr. Lyons's case, death took place in sixteen hours from the first attack, which was ushered in with chills, headache, and sick stomach, (the last two of these symptoms afterwards disappeared), with an intolerable sense of weariness and pain in the legs, back, and shoulders. There was no hæmorrhage from any part, but the prominent symptom—which remained after death—was the presence, on most parts of the body, of "irregularly shaped dark purplish patches . . . with a general dusky purplish discolouration of the intervening skin." No post-mortem examination could be had in this case. In the same Journal for 23rd May, 1866, another case, which post-mortem examination showed to be one of cerebro-spinal arachnitis, is reported in Dr. Lyons's Clinique. In this case, which lasted forty days, there were no gastric symptoms, or signs of nervous excitement or delirium, as in the case above given by me; in other respects it corresponded to the symptoms described by Dr. Mayne. In May last, I saw a remarkable case at Sir P. Dun's Hospital, under the care of Dr. Banks; and in it, also, pathological evidence after death proved it to be cerebro-spinal arachnitis. The duration of the disease, in this instance, was about three days, and when I saw the patient on the third day, he was discoloured with violet staining of the skin on various parts of the body, but without extravasation. In the account of this case given in The Medical Press and Circular for 30th May, 1866, the symptoms and pathological appearances which coincided with Dr. Mayne's cases are given with Dr. Banks's remark, that "the deep discolouration of the skin was also a strange and peculiar feature." Unconsciousness occurred at the outset in this case. In the same journal for 13th June, 1866, (Medical Press and Circular), Dr. Little, F.R.C.S.I., relates a case of "Black Death." "The advent of the disease [he writes] was marked by a dusky discolouration, its progress by deeper-tinting, and by the developement on the face, hands and feet, of broad dark patches, which, as the disease advanced, became more intense in colour, and at its termination resembled the bruises of a hammer. . . . From first to last, [the disease lasted four days], restlessness, anxiety, and semi-delirium, excitement of the circulatory and respiratory organs, and spasm of the voluntary muscles, were present."

A recent case of "Black Death" was published by Dr. Ridley, F.R.C.S.I., in the Press and Circular for 3rd April, 1867.

This case, during which the patient was conscious up to an hour before death, lasted twenty-nine and a-half hours, and closely resembled those of Dr. Lyons (at least, the first and last mentioned of them), not only in the general symptoms, but also in the peculiar spotted discolouration of the skin.

From all this I conclude, that if a post-mortem examination had been made in the case which I have detailed, there would have been found evidences of meningeal disease, at least as far as regards the spinal column.

Analogy would lead us to expect this, while the great dissimilarity of this case in some respects to any or all of the others mentioned or described, should not be held to militate against this view; for of those cases, in most of which there was a terrible but indescribable affinity, some were sudden, others were lingering; some had head symptoms, others had not; some had diarrhœa, others had not; and so on with nearly all the symptoms except those which occur commonly in other diseases; and one or more of these other diseases might precede or be complicated with cerebro-spinal symptoms—*e.g.*, headache, pains in the bones and back, sickness of stomach, &c., occur in other affections, one or more of which might precede or be complicated with cerebro-spinal arachnitis.

Perhaps one of the best and most recent treatises on cerebro-spinal meningitis (in English) is to be found in "Flint's Practice of Medicine" (pp. 534, &c.), published in Philadelphia in 1866. A careful reading of this treatise further convinces me of the great variety, the masked, and even opposed, nature of the symptoms of this affection in various cases; and I could not clearly identify the case above described with Dr. Flint's description, any more than with any of those already quoted, or with those of Dr. Darby, of Bray, who, we must not forget, gave us such early and important information on this subject, in The Medical Press of April 1st, 1846.

With regard to the symptoms which I have called hysterical, I may note that the mother of this young lady died, about six months before, from a comparatively rare form of uterine disease, during the last stage of which she had convulsions and nervous symptoms, strongly resembling those in the present case. She also had uræmic poisoning which did not exist in this instance. Moreover, the young lady was a marked example of what Dr. Todd, in his clinical lecture on local hysteria and catalepsy, (Beale's edition, p. 885), has called the "facies hysterica," and his remarks on the symptoms of hysteria and its general but not universal connection with uterine irregularity, however slight, are very much to the point as regards this case. What hysteria really is, is a much more difficult question to answer than the converse, what it is not. I take it to be, as defined by a writer whom I have already quoted, and whose chapter on this subject bears strongly on the present case (I mean Flint, pp. 619), "an abnormal condition of the nervous system and the mind which enters largely, as a morbid element, into a great variety of affections." The same writer further remarks, that "as regards prognosis, hysterical attacks are proverbially devoid of danger. The practitioner, however, is not to lose sight of the fact, that hysteria may be associated with affections which are serious."

I have already spoken of the gastric symptoms which manifested themselves almost at the outset of this case. Except that the patient did not complain of pain in the region of the stomach, I think the description which the late Dr. Cathcart Lees published of what he called "Subacute Gastritis," (Lectures on Diseases of the Stomach, &c., Dublin, 1857, pp. 21, &c.,) answers fairly to most of those exemplified in this instance. They were such as might have been looked for, or at least not considered unusual, from the nervous shock arising out of uterine irregularity as already noticed. The post-mortem appearances were certainly unusual, and I do not pretend to offer any explanation of them. In some respects they resembled, though in an exaggerated degree, Frerichs's description of the disease described by him under the name of "Acute Atrophy of the Liver," (Clinical Treatise on Diseases of the Liver, vol. i. pp. 196, &c.,) but the case here recorded wanted two essential symptoms which Frerichs observed in his cases: jaundice and discolouration of the skin, with hæmorrhage, *during life*. I do not know if the beginning of this case may not be fairly referred to what Dr. Churchill and other writers on "Diseases of Women" describe under the name of "Reflex Irritation from Disorder of Menstruation." (Churchill, pp. 239, etc., 6th edition, 1864). At any rate it seems abundantly clear, so far as symptoms can justify any one in making a diagnosis, that the lesion was in the nervous system throughout.

In writing of the rapid, almost immediate, decom-

position which set in when life became extinct, I used the term "dissolved" with reference to the body; and I did so advisedly. A sacred writer describing the death of the body under the figure of the dissolution or taking down of a tabernacle or tent, used the word καταλυθῇ, usually translated "were dissolved" (St. Paul, 2 Cor. v., i.), and which, in another form, is elsewhere used in the architectural sense of "taken down" (καταλυθήσεται), with reference to the complete pulling down, or utter destruction of the stones of the temple at Jerusalem (St. Mat. xxiv., 2). Now this word in another form, κατάλυσις, is the technical *catalysis* with which we are all more or less familiar, and which could, with much propriety, be used in reference to the case here attempted to be described and recorded.

Since the preceding remarks were written, I have read the account of the case of so called "Black death" published in THE MEDICAL PRESS AND CIRCULAR of April 24, by Dr. Benson, junr., of this city. It goes far to show that there is no necessary connection between the cutaneous discolouration and cerebro-spinal arachnitis. I do not consider the phrase "black death" at all a proper one as applied to the cases lately called by that name. Any one who has read the vivid description of the mediæval black death, to be found in Hecker's "Epidemics of the Middle Ages," will admit the force of this assertion; and I need only refer the reader to chapter 2 of his work, where, after stating that the most memorable example of that great pestilence was the plague which desolated Asia, Europe, and Africa in the fourteenth century, he states that "It was an Oriental plague, marked by inflammatory boils and tumours of the glands, such as break out in no other febrile disease. On account of these inflammatory boils, and from the black spots indicatory of a putrid decomposition, which appeared upon the skin, it was called in Germany and in the northern Kingdoms of Europe *the black death*, and in Italy, la mortalega grande—*the great mortality.*" (Hecker chap. ii., p. 2, Sydenham Society's Edition.)

Hospital Reports.

METROPOLITAN FREE HOSPITAL.

CASE OF TINEA TONSURANS IN A CHILD AGED NINE YEARS, ACCOMPANIED BY CHOREA, WITH OBSERVATIONS.

Under the care of Dr. CHARLES DRYSDALE.

MINNIE W., aged 9, a delicate little girl, was seen by Dr. Drysdale on 18th February, 1867, affected with chorea and falling of the hair in a circumscribed spot. There is on the occiput a small circular space of the diameter of a five-shilling piece, from which the hair has fallen. The colour of the skin is slightly reddish, and has a few white scales on it; it sometimes feels itchy; round the circumference of the bald patch the hairs are dull and broken off at about one-eighth of an inch from the scalp; there are neither vesicles nor pustules present. The patient is subject to chorea Sancti Viti, and this makes her almost unmanageable at night. A hair from the patch being examined under the microscope, shows that the root is not bulbous, but nearly destroyed, and the hair near the scalp has swellings on it, in the midst of which are seen the spores of a cryptogamic plant. The end of the hairs broken off near the scalp exhibits the appearance of a brush, being split up by the multitude of spores of trichophyton tonsurans. Dr. Drysdale ordered the hairs in the circumference of the patch to be pulled out with tweezers, and a sponge dipped in the following lotion—hydrargyri bichloridi, gr. xv.; aquæ oj.; alcohol q.s.—to be applied to the part, as a parasiticide, night and morning.

April 2nd.—The disease has been checked, and there is no longer any necessity for treatment.

Tinea tonsurans is one of these affections which have been grouped together by Hardy, under the name Trichophyte. The other two being herpes circinatus and sycosis. The same or a similar parasite appears to cause all these diseases. The name herpes is ill chosen in the cases of these parasitic diseases, since neither in herpes tonsurans nor herpes circinatus are vesicles frequently observed. These three diseases were always considered to be quite independent of each other, until M. Bazin and M. Hardy, of the H. St. Louis, Paris, discovered that they were identical. This opinion, however, is not admitted universally—some asserting that they have never been able to find a specimen of the fungus in the case of mentagra; but neither is it easy, in many cases, to find an acarus in many old cases of itch, where numerous eruptions have disfigured the body. The disease h. circinatus is easily recognised. It is characterised by one or more isolated, red, slightly-raised patches, surmounted by little, dirty white scales, which, as they extend in surface, get well in the centre. There is generally a feeling of itching; but no general symptoms are present. It is generally seen in the face—sometimes in other situations.

Tinea tonsurans is found on the scalp in rounded patches, on which the hairs are dull, dry, and broken off at about one-eighth of an inch from their base. The diseased part is swollen, and the epidermis raised in form of scales. The parts are generally itchy. Sometimes there are vesicles, sometimes pustules, though these are often absent. If we pull out a hair from a plate of tinea tonsurans, and place it beneath the microscope, we are struck with the alteration of its root; in fact, in place of having that rounded aspect which it generally presents, and which makes it resemble a bulbous plant, it is flattened, cut short off, and sometimes destroyed. The hair is bent, and has knots on parts of it, or swellings, at which points it seems burst and split up, and nothing but a heap of spores is to be seen in it. At the end of the broken hairs the hair looks as if it were a brush, its longitudinal fibres being separated by spores. These spores are in immense quantities in h. tonsurans, and but little mycelium is to be seen in this fungus. In some cases this disease is spontaneously cured; but generally it goes on to produce incurable baldness by the destruction of the hair follicle. This result sometimes requires a long time, as much as ten or fifteen years in some cases. The diagnosis of tinea tonsurans from impetigo and from syphilitic eruptions is to be made by a microscopic examination. It is not so necessary to diagnosticate tinea tonsurans from favus, because the treatment is identical in both of these cases. Tinea tonsurans is scarcely seen except in children: whilst h. circinatus appears at all ages. The sole cause of these diseases is contagion, and hence it rages in schools. The scientific treatment of the disease consists in pulling out the hairs, and then using a parasiticide lotion night and morning, in order to destroy the fungus in the hair follicles. The lotion most recommended is as follows: hydrarg. bichlor. gr. xv.; alcohol, q.s.; aquæ oj. ft. lotio. A sponge or hair pencil is dipped in this, and the orifices of the follicles frequently wet with it. It is sometimes difficult to pull out the hairs, but it must be done as well as possible.

RICHMOND, WHITWORTH, AND HARDWICKE HOSPITALS.

Dr. LYONS'S CLINIQUE.

PERICARDITIS AFTER TYPHUS.

TOWARDS the close of the month of March, a case of interest terminated at the Hardwicke Hospital, under the care of Dr. Lyons. The patient was a lad, aged seventeen years; and he had been some weeks in hospital at the time of his death. He exhibited all the characteristic symptoms of typhus of a low type, with depressed circulation and enfeebled heart. Soon after his admission, Dr. Lyons observed the development of a very extensive diphtheritic exudation on the throat, which threatened at one time to be a fatal complication. It was not so, however; under prudent and watchful management this symptom was overcome, but only after much trouble. For seven days or more the exudation was now appearing, and again re-appearing on the throat, and this notwithstanding the various local and general modes of treatment used for it. Near

the end of the fourth week the patient was making a fair recovery, and most of the grave symptoms had disappeared, when Dr. Lyons observed a peculiar irritability of the pulse, which rose to 120 ; and also a distinct increase of the cardiac action. Dr. Lyons did not readily incline to the opinion that anything of an inflammatory nature was likely to attack the heart at this advanced stage of typhus, but a few leeches were applied over the region of the heart with the result of producing some relief to the patient. In a few days the symptoms became gradually more aggravated, and the lad died on the 27th day of his illness. The symptoms had taken a sudden turn for the worse; and in order to explain and account for this, Dr. Lyons had a post-mortem examination made some hours after death.

This examination was made with great care by Mr. Crauford, Dr. Lyons's clinical clerk, and with the result of affording evidence of acute pericarditis in an advanced degree. The entire pericardium and the surface of the heart were covered with lymph. There was effusion of fluid to the amount of eight or nine ounces into the pericardium ; and, therefore, Dr. Lyons concluded that the sudden occurrence of this effusion was the cause of, and sufficiently accounted for, the rapidly fatal issue of the case.

Hereon Dr. Lyons remarked that, in his experience, this was the second case of pericarditis proving the immediate cause of a fatal termination in typhus, and, on looking over the standard works on the subject, he found that it was a very unusual complication. In the first case which Dr. Lyons saw, the patient died on the twenty-fifth day of his illness with characteristic symptoms, and although he could not give proof similar to that in the present case, viz., by the result of a post-mortem examination ; that the proximate cause of death was pericarditis, yet no doubt existed in his mind that such was the case. The friction sound was exceedingly well marked, and it was noticed that this person had shown extreme debility in the circulation ; extremely feeble impulse, and extreme debility of the cardiac sounds during the second week of his illness. The same symptoms existed in the case above noted, and Dr. Lyons considered it remarkable where the heart was so debilitated that in a disease like typhus, which, as the researches of numerous and well qualified observers showed, produced so remarkable an effect in weakening the cardiac muscles ; that at the termination of such a case the heart and its investing membrane should be enabled to "take on" inflammatory action of so high a degree as this. Dr. Lyons was also of opinion that, looked at from another point of view, this case was interesting ; the exudation of lymph on the pericardium might be connected with the exudation of lymph in the throat, as a characteristic feature in this particular case.

Dr. Lyons exhibited the morbid specimens obtained at the post-mortem examination in this case at a recent meeting of the Dublin Pathological Society.

CURRENT LITERATURE.

The Eight Annual *Report of the Sussex County Lunatic Asylum*, at Hayward's Heath, is, on the whole, a satisfactory one. The rate of mortality during the year has been rather higher than usual, but this is explained by twenty-five cases having been admitted in a hopeless, some of them in a dying, state. In connection with this Asylum, two small houses, to serve as cottage hospitals for the two sexes, have been purchased last year, with the intention of removing to them any cases of infectious disease that may arise. We should also notice that Dr. Robertson, the Medical Superintendent, has adopted the form of tables for his statistics, recommended by the Medico-Psycological Association, which have been approved as suitable for general adoption by the Commissioners in Lunacy.

The Second Annual *Report of the Burntwood Asylum* (Staffordshire), shows rather a less mortality than had been expected. The Asylum accommodates 214 inmates, of whom 155 are of the male sex. The construction is scarcely yet completed, as the papering and painting, &c., of some portions is still proceeding. The average cost of the patients per annum has been at the rate of 9s. 11d. a-week each. The average weekly number of inmates has been 206. The Medical Superintendent, Dr. R. A. Davis, speaks in high terms of the manner in which the nurses and attendants have discharged their duties, and expresses his thanks for the hearty support he has had from the Committee, in organising this new and promising Asylum.

The *Popular Science Review* opens the current number with an article on "Insect Embryogeny," by Dr. Fripp, of the Bristol Medical School. Then follows a very interesting account of the "Struggle for Existence amongst Plants," by Dr. Hooker. Mr. Chambers gives some practical observations on "How to Study Meterology," showing how simple and easy it is for any one so inclined to amass valuable facts. Mr. Barrett's article on "Sensitive Flames," is a fair sketch of the subject. Dr. Attfield treats of "Paraffin Lamps and their Dangers;" and Mr. Bates winds up this part of the review with an "Attempt to Approximate the Date of the Flint Flakes of Devon and Cornwall." The scientific summary is copious and varied, and forms a feature of this journal. The reviews proper, are not numerous, nor particularly carefully done. In this department alone do we see need for improvement.

The *Journal of Mental Science* for this month contains, as usual, in addition to original communications and reviews, a valuable Quarterly Report on the Progress of Psycological Medicine, and a brief epitome of English Psycological Literature. In the notes and news department, the correspondence of the Commissioners of Lunacy respecting the London Surgical Home necessarily takes the first place. We turned to it with interest, expecting to see this point treated with the impartiality of such able men outside recent debates, as the editors of this journal, and were surprised to find the only comments to consist in two stale quotations from the *British Medical Journal*, which are quite destitute of argument, and only advance a statement that the *British* has the "best authority for stating" that the Commissioners are considering the subject.

WATTS' DICTIONARY OF CHEMISTRY. London: Longman, Green. Reader, Dyer. Parts 35 to 38.

Parts 35 to 38 takes us from "Quadrantoxide" to "Stilbite."

The principal articles occurring in the numbers are on Quinine and its Salts ; Radition and Conduction of Heat by Professor E. Foster; Respiration by Dr. W. Foster ; Secondary Alcohols by Professor Wanklyn ; Silicates ; Soap ; Sodium, and its Compounds ; Specific Gravities ; Spectrum Analysis, and Starch.

The last but one is from the pen of Professor Roscoe, and is carefully illustrated.

As it is our intention to review this important work on its completion, and in its integrity, we now only notice its progress, but wish at the same time to offer a suggestion. The dictionary will take about four or five years in issuing from the press, and it will be many years before a new edition of such a book can be re-issued. In fact, the value of such works, which are for the purpose of reference, is generally gone long before a new edition is contemplated.

Mr. Watts should therefore issue a yearly appendix, which, we have no doubt, will be as valuable to possessors of the dictionary as it will be remunerative to the publishers. The editor has succeeded in giving us a book, which, from its great merits, has made his name familiar to all men of science. He is therefore under an obligation to keep it written up to the requirements of the day. This cannot be done by the desultory publication of fresh editions after long periods of rest.

C.R.C.T.

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The Medical Press and Circular.

"SALUS POPULI SUPREMA LEX."

WEDNESDAY, MAY 1, 1867.

THE SUMMER SESSION.

The day on which this number of the Medical Press and Circular comes into the hands of the reader, the Medical Schools open the Summer Session. As the students return from their brief holiday to the duties of preparing themselves for their futures, a few words of welcome and advice may not be out of place. Those who have energetically pursued their labours during the past winter, will have laid for the coming summer's work a broad foundation on which they can now commence to build. Even a first-year's man who has plodded along in the beaten track, can scarcely have failed to have acquired so much anatomical knowledge as to facilitate his progress in some of the more practical subjects that will now be laid open to him. If he has only frequented the dissecting-room to an average extent, with his observant faculties in full exercise, he must have obtained a store of important knowledge with which to supplement the regular course on Anatomy, and the reading to which that naturally leads. He may, therefore, come back to work, refreshed by the month in the country, and thereby prepared with renewed energy to grasp the subjects of the briefer term, and make their details his own for future use. He may do this with ordinary diligence, feeling, as the weeks pass by, each one brings him nearer to the desired goal.

On the other hand, the idler who has wasted the winter, alas! that there should be any such! while he may have needed the month's recess to recruit his health, he can scarcely have given himself up to the thorough enjoyment of his holiday. Thoughts of wasted time must have marred many of his pleasures, and the fear of examining Boards before his eyes, must even now lend point to the exhortations of his teachers to strive to retrieve himself. Unless he would abandon all hope of accomplishing the task before him, he must strain every nerve to make up for lost time. By dint of laborious days and studious nights, if blest by natural ability and strong health, he may yet hope to win back, as it were, from time, some of the advantages he has so carelessly let slip. Let him then at once make one firm resolve and enter on the struggle with all the energy of youth, and the deep conviction that success depends on a supreme effort. It is a hard task, indeed, to cram the work of a year into three months, but in this case it must be done; and at every institution, we rejoice to say, there are amongst the teachers some who will gladly aid every misguided pupil who is ready to turn his back upon the blandishments of ease, and live laborious days. We add our voice of welcome to all—the most diligent, who are sure of success, on the one hand—the most idle, who fear the worst, on the other. To the former we say go on and prosper. To the latter we whisper the word of encouragement *nil desperandum.* To both we say, keep steadfastly before you for the future the great end of your studies—not the mere possession of licenses to practice, but the ability to follow your profession with credit to yourselves and benefit to your patients. With this aim constantly in view, great as may seem the effort required, and extensive as truly is the information to be stored up, you may work and hope, finding that day by day, week by week, and season by season some progress is made, and in the end you will prove the great truth, *Labor omnia vincit.*

A word respecting the classes which the student has now to attend. First of all is the important subject of midwifery, one of the first necessities in actual practice is a familiarity with this branch of the healing art. Wherever the future lot of the student may be cast, he may at any moment be summoned to display the skill he has acquired. In no department will he have greater opportunities of exercising all those qualities which make the able practitioner. In none may he have more need of that self-reliance which is inspired by knowledge, and that ready tact called out by unexpected difficulties, which even the patient and those around, though they may not understand, will appreciate and reward with confidence. It is true that in a large majority of cases the exercise of patience, and the exhibition of that simple and kindly sympathy and delicacy that constitute the conduct of a true gentleman may suffice. But on other occasions, the need for other and perhaps sterner qualities may be urgent. With no assistance near, the life of a fellow-creature, the happiness of families, may depend on the prompt exercise of the highest professional skill and courage.

If we add to midwifery the allied subject of diseases of women and children, we have at once, as a study, at least two-thirds of the actual practical part of the Profession—surely a sufficient reason to incite the student to earnest work, and enforce upon him

the absolute necessity of mastering the Summer Courses. Beside this, the other lectures seem to grow less important; but they, too, must not be neglected.

Perhaps the next in order of importance is Materia Medica, for it is a branch of knowledge that in practice is called into daily requisition, and many of its details must become "familiar as household words." It has not, however, the same element of requiring the practitioner to be ready for sudden peril, that renders Midwifery of such paramount interest, while the almost necessary acquaintance with its outlines for the simplest purposes renders it less liable to be neglected.

Botany may, perhaps, be regarded, so far as it is necessary to urge it upon attention, as an agreeable branch of Materia Medica. In the botanical excursions now so regularly organised, the student will find recreation and healthful amusement, which may relieve his harder toil.

Practical Chemistry and Forensic Medicine are two departments that are sometimes thought too little of. Both have been followed in this country as exclusive professional occupations; yet it may happen that any practitioner may be called upon for his opinion. Besides which, including what has been called Toxicology, these sciences may at any time be needed in ordinary practice. It may not be essential to be able to analyze the medicines employed, or the products of disease, or to offer opinions in aid of justice; but it may at any moment be a question of life or death to be able to diagnose a case of poisoning, and to administer the proper antidote.

In offering these observations on the chief topics which will occupy students in the Session that opens to-day, we have no wish but, from an independent position, to confirm the wise counsels which, we doubt not, will be offered by the Professors, and encourage, with a word of sympathy and an assurance of our interest in their welfare, those who are preparing themselves for the practice of our Profession.

What we have said will, we trust, be received in as kindly a spirit as it is intended. Written with a vivid recollection of our own experience in student days, it contains the sum of our experience on the subject since. To complete our advice, we have but one thing to add: while diligently acquiring new knowledge, to prevent, by a use of that already gained, the labour of the past being partly lost, through the memory loosening its hold on subjects in which it is not sometimes exercised.

Notes on Current Topics.

The Royal Family.—Since we last alluded to the subject, the progress of the Princess of Wales towards recovery has been steady though, unhappily, slow. It is a source of regret on all sides that the prospect before Her Royal Highness is still of necessity for rest.

The Princess Christian has recovered rapidly and without a bad symptom from her confinement, and already there is a talk of her visiting Windsor.

The Easter Volunteer Review.—It is satisfactory to be able to report that the Volunteer Review at Dover, on Easter Monday, passed off without any serious casualties. Every preparation was made to meet any accident that might occur, and the arrangements for that purpose have been pronounced on all hands faultless. We have not the slightest doubt that the Surgeons of the Volunteers will always be able to discharge such duties as may fall to their lot, and while congratulating them on the absence of sad accidents at the Easter display, add our word of commendation for their efficient preparations for the occasion.

The Metropolitan Poor Act.—This important measure has received the Royal assent, and is now therefore law. We shall take an early opportunity of submitting it to our readers, probably next week. Its provisions, in many respects, have already been discussed in our columns. There are, however, not a few points to which we shall have occasion to direct attention.

Karl Anderson has been respited during Her Majesty's pleasure. In this case the decision of Mr. Walpole will be supported by the opinion of the whole community. We should be very glad, however, to hear that his life is not spared merely on account of Mr. Walpole's opinion, but that some such investigation, as we last week suggested, into his mental condition will be undertaken, and the Profession made acquainted with the evidence elicited.

Domiciliary Sanitary Inspection.—Under this heading a correspondent of the *John Bull* newspaper proposes the appointment of female sanitary inspectors to visit houses and examine those parts of the premises most likely to escape the eye of the mistress. The writer is well aware of the objection that would be felt by many to allowing their houses to be thus inspected, but maintains that as the plan would only be voluntary, there would really be no intrusion into the sanctity of the household, nor any invasion of the "Englishman's castle." It is scarcely to be denied that a large number of persons are well qualified for the task proposed, and that such occasional inspection would probably prove more efficient than the constant eye of the untrained lady of the house, who is in reality, to a large extent, almost excluded from some corners of her own establishment. Again, if we could learn from what fund these inspectors could be paid, benefit would be conferred on many deserving persons. It is stated that many applications for the post have already been received. Should the idea be practically carried out, we trust only those of superior education would be employed. To commit such an inspection to ex-housekeepers and cooks would decidely destroy all chance of its success. A thorough lady would be able, by her own natural instinct, so to act as to secure the good-will of both mistress and servants. It is the ignorance, obstinacy, and neglect of domestic servants that make half the non-sanitary conditions of our houses. It is in the basement that we must seek most of the causes of disease which would be removed by the proposed plan. Moreover, one object of the inspectors should be to point out to servants the manner in which they endanger their own health, and that of the families in which they live, and to inspire them with a wish to improve. This could only be

done by a lady superior to themselves in education and position, and with whom the masters and mistresses could confer on an equal footing.

SERVANTS' CLUB.—The Working Men's Club and Institute Union offers a prize of £5 for the best essay on Servants' Clubs. The competitions are expected to relate the history of these clubs, to point out the evils which prevail in them, and suggest means for placing them on a better footing. The Earl of Shaftesbury, the Rev. Henry Solly, and Mr. Hodgson Pratt, have accepted the office of adjudicators, and all essays must be sent in by the 31st of May. Authors in search of a subject may be inclined to contribute their mite towards the elucidation of an important social topic, and if the prize offered seem a modest one, it may yet be satisfactory to the winner to hope that he has suggested some method of promoting a better understanding between servants and their employers.

WIGHT *v.* WIGHT AND FIELD.—The question of costs in this case was brought before the court on the 24th ult. The respondent has to pay costs, and the co-respondent his own costs in the second trial. Now that litigation is over, the expenses incurred by Mr. Field in successfully vindicating his character will soon be ascertained. The fund being raised by his professional brethren and friends is going on favourably, as will be seen by the list we publish in another column. It affords us much pleasure to observe the unanimity of feeling in this cause.

HANCOCK *v.* PEATY.—This extraordinary case has come to a conclusion during the past week. In withdrawing from further proceedings, Mr. Peaty allows his marriage to be pronounced invalid, and the case altogether continues in the same obscurity as before.

"On the 24th ult., Dr. Spinks, Q.C. (with whom was Mr. Searle), for the respondent, stated that although Mr. Peaty still retained his own private opinion as to his wife's sanity, and was still anxious that they should continue to live together, yet as her present medical attendant was not able to give a certificate that in his opinion she was competent to manage her own affairs, Mr. Peaty had determined not to make any further opposition to the decree. He came to this conclusion with regret and by the advice of others, but he thought that he should not be justified under the circumstances in prolonging the suit.

"The Judge-Ordinary accordingly pronounced a decree of nullity."

All, therefore, that the Profession learns further of the case is, that her present attendant hesitates to pronounce her sane.

AUSTRALIAN BEEF.—The Society of Arts Committee upon the food of the people, has lately had under its notice an article to which we would draw attention. It is fresh beef that can be sold retail at 7d. per lb. *without bone*. It is to be had in tins of 6 lbs. each, and the only peculiarity of it is that it seems a little over-cooked. There is nothing novel in the process of curing it; the only reason it can be sold at half the cost of English beef is, that in Australia there is so plentiful a supply of oxen, and rearing them is so inexpensive. Soups, beef-tea, and other preparations made from this beef have been pronounced equal to any, and we may consequently hope that the poor may be enabled to increase the amount of their animal diet in spite of the high prices that have lately prevailed for meat. Charitable institutions will also do well to make a trial of this importation.

ON THE PURIFICATION OF WATER: A NEW METHOD.

DURING the year 1866 we had afforded us an opportunity of judging of the quality of the water supplied for consumption to the inhabitants of the metropolis. At no more appropriate period, perhaps, could the labours of Drs. Letheby and Frankland have been given in the cause of public welfare, and the results have served to develop a very important epoch in the history of cholera.

We may state that from circumstantial evidence, impure water of a certain description was the main feature co-existent with the progress, and its purification with the restriction of the choleraic epidemic.

So soon as it was ascertained that without doubt impure water, such as we were once supplied with, was a cause of originating disease, and that further demand, necessitated by the increasing population, was not met by an adequate supply, many schemes were set about for remedying these evils. The importation of entirely fresh supplies from more than one source was suggested. The collection of rain-water; taking our supply from higher up the Thames; from deep artesian wells, and the purification of our present supply by diverse schemes. As the water for domestic and manufacturing purposes requires freedom from impurities, differing from those necessitated for dietetic use, more than one suggestion embodied the idea of dividing these, and obtaining the two from different sources.

The estimates furnished ranged widely, one being as much as 25 millions sterling.

To sum up briefly the design of these various shemes—they are nearly all very costly; contemplate a considerable lapse of time before any benefit can be derived from them; and substitute an entirely different article from that with which we are now supplied. Those that propose the utilization of the present supply, are of course excepted in the latter instance. There is no doubt a better quality of water than our present is not only desirable, but necessary, and the best means of procuring such is worthy of consideration. Is it desirable, however, that we should discard our present supply, and seek an entirely fresh source freer from impurity and more fitted for consumption? It is possible to reply in the negative, and substantiate reasons for so doing. As to one of the foregoing schemes, according to the analysis of Professor Way, the water from the Cumberland Lakes is far superior to London water in point of freedom from foreign bodies. The former gives 4·69 grains per gallon, of which ·59 grains is organic matter, and the latter averages 20·57 grains per gallon, including 1·01 grains organic matter. But these results are not absolute in their indications of quality, they must be taken in consideration with other circumstances. The average amount of impurity or residue naturally found in good potable and wholesome water is from 17 to 23 grains per gallon, according to the best authorities, Dr. Taylor amongst others.

In analyses performed by Professor Chandler, of New York, of seventeen samples of water obtained between Syracuse and Rochester on the New York Central Railroad, the average was 20·57 grains per gallon, and although we often find samples differing from these limits, 1·3000th to 1·4000th is the amount of impregnation nature furnishes as a standard. Is this solid residue then extraneous to the reaction of the water on the system; or, on the other hand, necessary for constituting and restoring the waste of the bony structure of the frame, and enriching and purifying the blood? In all probability the latter. Independent of this, however, we have been accustomed, since endowed with life, to consume, and exist upon aliment, amongst others, that contains 20·57—70,000 of salts and earth with other impurities. It is no uncommon occurrence to find change of locality prejudicial to individuals, and sometimes perceptibly owing to the difference of water consumed. These are points that require something more than theory for their solution. Organic matter is the doubtful substance that we cannot see. It may be present without impairing the quality of the water, but more often it is

otherwise. We have no certain test capable of generalization that will determine the amount of evil in any sample of organic constitution brought under notice, and therefore it is safe only in rejecting all alike. Owing to generation and decay of this substance its quantity cannot be taken as constant, and the variation generally depreciates the quality.

There is another suggestion for supplying water to the metropolis. It proposes to utilize the present supply by purification—1st by precipitation of earthy salts and sedimentary matter, and 2nd by organic oxidation to reduce the hardness and contamination to its minimum; and to perform these operations on the existing works, now occupied by the water companies, and these operations are proposed immediately before actual consumption, and thus a preventative is insured against spontaneous organic generation.

For a continuous supply of water, two similar reservoirs, or one reservoir divided into equal parts, is constructed without any filtering medium whatever, but simply acting as a store. At a small distance above the bottom sufficient to avoid sediment, outlets are provided, guarded by sluices that can be opened at desired intervals. Under the reservoir a space about seven feet in depth is constructed extending under the whole area, and on the floor of this a bed of animal charcoal, twenty-six inches or three feet thick, is provided. This chamber is in direct communication with the supply-pipes to the various localities. By means of the arrangement access may be easily obtained to renew or cleanse the medium of filtration without disturbance to the working, and it also affords free admission of fresh air, and the escape of foul gas evolved from the filtering body. Near to the reservoirs is an apparatus through which the water is supplied. It is constructed on a self-acting principle to embody Dr. Clark's methods of extracting hardening matter by precipitation. This completes the entire arrangement of the system. The water first, by passing the softening apparatus, precipitates with the earthy salts all sedimentary matter, and, as has been found by experiment, much organic contamination in the reservoir. As this requires an interval of time, the reservoir is divided as described into two sections, one remaining undisturbed while the water is being introduced into the other. When clear, which generally takes place in the course of an hour or little more, the sluices are allowed to conduct the water at once into contact with the animal charcoal which, to this time, has remained free and exposed to the atmospheric air, to evolve any gaseous impurities previously imparted to it, thence by rapid filtration it enters the supply to the mains, precaution being taken to prevent any charcoal being mechanically carried with it. The filtration, it will be seen, is performed by the alternate use of two media. In practice, this is necessary for the precipitation of the mechanical impurities, and the ventilation, if we may so allude to it, of the oxidizing medium. The same system is applicable to any magnitude, and an apparatus for embodying the idea, specially intended for manufactures, has been introduced. Even to house-cisterns, with a small amount of care, it is possible to apply it. According to an analysis and report recently made by Dr. Letheby, new river water, after passing through such an apparatus, contains 19·98 grains of solid matter per gallon, of which 0·52 grain is of oxidizable organic matter, and 15 grains of hardness. After passing through the apparatus it is reduced to 8·89 grains of solid matter per gallon, of which 0·12 grain is oxidizable organic matter, and 6 grains hardening salts. The report proceeds to state that—"By the subsequent filtration of the water, the organic matter was almost entirely destroyed. This was proved not merely by the chemical tests to which the water was subjected, but also by the snow-like appearance of the saline matter obtained on evaporation." The results approach those obtained on analysis by Professor Way of the water from the Cumberland lakes already referred to. The expense of applying this system is nominal, taking into comparison most of those before the public, and possesses the advantage of utilizing the present supply. The proposer of this method, and patentee of the apparatus, is Mr. T. W. Tobin of 8, Old Jewry, E.C.

"CORK AS A SEAT OF LEARNING."

"*Daily Southern Reporter*,
"Cork, 27th April, 1867.

"Sir,—My attention has been directed to some remarks in The Medical Press and Circular of the 24th inst., which seem to impute to Professors Corbett and Tanner the writing of certain paragraphs in the *Reporter* of the 13th inst. You have been uncourteous not only to those gentlemen but to this paper also, and without any grounds whatever. I have had sufficient experience at the press to entitle me to decline being instructed by you in the duties of a journalist. I cannot admit your right to question the propriety of publishing those 'pseudo-editorial articles,' as you are pleased to call them.* As I desire, without dragging the names of those eminent gentlemen into a newspaper controversy, to remove immediately the imputation you have unwarrantably cast on them, I depart from the usual course, and take the liberty of addressing you, in order to inform you that I wrote and published the paragraphs in question, without the knowledge or cognizance in any way, direct or indirect, of either Dr. Corbett or Dr. Tanner. Being personally aware of the facts, I conceive I had a perfect right to make them public. Both those gentlemen are, therefore, innocent of the charge which you imputed to them. Your sense of justice will suggest to you the necessity of your withdrawing it; and, I request, you will do so in a manner equally prominent to that in which it was put before your readers.—I am, sir, yours, D. F. Buckly."

[We cheerfully transfer the responsibility of the editorial puffing of Professors Corbett and Tanner to which we called attention in our last, from those gentlemen to our correspondent, premising that it is a manifest misrepresentation of our observations to impute to us any charge against these gentlemen. We expressed a hope and belief that these paragraphs would be found to be the work of an injudicious friend. Although the articles in question have not been personally repudiated by either of the gentlemen to whom they referred, we presume we may attribute the irate mood of our correspondent to a very vigorous remonstrance from them. We have simply to remark that, if the editor had reason to imagine that the publication of these puffs would be distasteful to the feelings of Professors Corbett and Tanner, as their professional rank would lead us to anticipate, he acted with unaccustomed indiscretion in publishing the rhapsodies, and those gentlemen owed it to their Profession, as much as we ourselves did, to elicit a disclaimer of their having countenanced, even in the remotest degree, so unprofessional a course.—Ed. M. P. & C.]

THE RECENT POOR-LAW INQUIRY.

The following is the letter received from the Poor-Law Commissioners, and read at the last meeting of the Board of Guardians of Limerick Union:—

Poor-Law Commissioners,
Dublin, 11th April, 1867.

Sir,—The Commissioners for administering the laws for Relief of the Poor in Ireland, transmit to you herewith for the information of the Board of Guardians of Limerick Union the minutes of evidence taken by Mr. Bourke, at an inquiry which he held in pursuance of instructions from the Commissioners, on the 2nd instant, and several subsequent days, into charges against Dr. O'Sullivan, resident medical officer of the Workhouse, and Miss Gerraghty, the storekeeper, which are contained in a report of a committee of the Board of Guardians appointed to investigate the state of discipline in the hospital department, and of the establishment generally. The charges against Dr. O'Sullivan may be stated as follows:—

1. Insubordination to his superior officer, Doctor Brodie.
2. Irregularly ordering extra diets to patients in hospital,

and stimulants and beef-tea to inmates not on the medical books, as well as to officers during illness.

3. Neglecting to compound medicines, and leaving medicines to a wardsman to be administered to patients as ordered on admission.

4. Omitting to keep the hospital book himself, and delegating that duty to an irresponsible person.

5. Disrespectful conduct and language towards the Sisters of Mercy, and obstructive interference with arrangements.

6. Disrespectful conduct and language towards the matron.

7. Excessive familiarity with Miss Gerraghty.

8. Disrespectful conduct towards the Committee.

The evidence as to the first charge appears to have exclusive reference to circumstances which took place in 1865, and which were at that time fully disposed of, and it is stated by Dr. Brodie in his evidence that the only instance of insubordination on Dr. O'Sullivan's part towards him since 1865, was about the time, or shortly after the time of the discussion of the subject of their duties, and that since then there has been no repetition of it, and they have acted harmoniously. In support of this charge reference is made to the fact of Dr. O'Sullivan having re-admitted to hospital three members who had been discharged from it shortly before by Dr. Brodie ; but it will be seen on reference to Dr. Brodie's evidence that he entirely relieves him from all blame, and is of opinion under the circumstances that Dr. O'Sullivan was quite right in re-admitting them.

The second charge seems to be in some degree connected with the first, as it appears to have been considered that Dr. O'Sullivan had been directed not to order extras without the sanction of the senior medical officer. No evidence of the existence of such a direction had been produced, and Dr. Brodie states that there is nothing objectionable in Dr. O'Sullivan's conduct as far as he knows, or has heard of it, in reference to the administration of wine or spirits, to patients or officers, and it will be seen that there is evidence of special and exceptional circumstances in each of the cases brought forward as instances in which stimulants or extras have been ordered for persons not on medical books.

The portion of the third charge which alleges neglect to compound medicines is explained by the fact that Dr. O'Sullivan appears to have been permitted to take apprentices, who have been employed by him, when fully instructed, and, in his opinion, competent to assist him in the discharge of his duty, and in regard to the leaving medicine with a wardsman to be administered, Dr. O'Sullivan explains that he occasionally orders cough bottles to patients on admission, or astringent mixtures, or things of that sort, and that he leaves a small supply with the wardsman to be administered as directed on the admission sheet, but that his directions thus given are confined to ordinary sorts of medicines, and to patients newly admitted, and he is satisfied that they cannot prove dangerous.

The practice in regard to keeping the Hospital books appears to be that which was in force when Dr. O'Sullivan was appointed, with the exception that the record of sickness and mortality formerly kept by Miss Supple is now kept by Dr. O'Sullivan.

In support of the charge of disrespect towards the Sisters of Mercy and obstructive interference with their arrangements the testimony of several witnesses is produced. It is shown by Dr. Parker that complaints on this head were made as far back as June, 1865, and Miss Butler, one of the sisters, states that the conduct complained of has continued up to the present time. Instances of the alleged unnecessary interference are given, the most recent being the proceedings which took place in the month of December last, in reference to the use of buckets in the sick wards at night. Several witnesses deposed to expressions more or less hostile and disrespectful, and some of them to the use of profane and coarse language in reference to the sisters. The existence of a rebellious temper on the part of some of the male patients, and hesitation on the part of the assistants is attributed to his interference. On the other hand, Dr. O'Sullivan produced witnesses to speak as to his respectful demeanour, and denies the use of the language attributed to him, and explained the circumstances under which he ordered the removal of the buckets, and which, in his judgment, rendered their removal desirable and necessary. He also explains the grounds of other directions given by him in his capacity as medical officer in charge of the hospital, which are adduced as instances of interference with the arrangements of the Sisters of Mercy. The charge of disrespectful conduct towards the Matron appears to relate to matters which occurred long since, and although the language stated to have been used by Dr. O'Sullivan to the Matron was objectionable and improper, the charge does not appear to be one of a very grave character.

The evidence in support of the charge of disrespect towards the Committee shows that Dr. O'Sullivan's language and demeanour to the Committee were such as cannot be justified, and appear to evince a hasty and ungovernable temper.

The charge of familiarity with Miss Gerraghty is fully sustained by the evidence of many witnesses, and is not contradicted ; and while the evidence does not afford any ground for suspicion of any immoral conduct, it clearly shows that the association has been such as to be highly imprudent, and calculated to produce, as it has done, gossip and scandal in the Workhouse, and to have an injurious effect upon the order and discipline and general moral tone of the Workhouse.

In regard to the charges against Miss Gerraghty, there is evidence of her having been heard to make use of angry and disparaging expressions in reference to the Sisters of Mercy, and her intimate association with Dr. O'Sullivan is shown in the evidence already adverted to. No defence on either of these points has been offered by her.

Upon the whole it appears to the Commissioners that while many charges relate to transactions long since inquired into and settled, some of them have not been sustained, and the testimony of Dr. O'Sullivan's conduct and efficiency as a medical officer of the workhouse is of a very high character. Dr. Brodie states in his evidence that he always found Dr. O'Sullivan competent, attentive and successful ; and Mr. M'Inerney, the late master of the Workhouse states that he does not think any one could have been more careful in discharging his duties, and that he always found him ready to carry out everything he desired in the house.

Were it not for the great imprudence exhibited by Dr. O'Sullivan in language used by him in the presence of inmates, regarding the Sisters of Mercy, and in his intimate and familiar intercourse with a subordinate officer of the workhouse, and in the continuance of that intercourse after it had been made the subject of a formal inquiry, the commissioners think that the union would have benefited greatly by the retention of his services ; but after the unanimous expression of opinion of the Board of Guardians against both him and Miss Gerraghty, the Commissioners think that both those officers will act for the best in resigning their respective offices, a course which will not have the effect of rendering either of them ineligible for service under the poor-law elsewhere.

The Commissioners request that the enclosed minutes will be returned when done with,

By order of the Commissioners,

B. Banks,
Chief Clerk.

Correspondence.

MR. THOMPSON'S REPLY TO DR. CAPLIN.

TO THE EDITOR OF THE MEDICAL PRESS AND CIRCULAR.

Dear Sir,—As Dr. Caplin, in his reply to my letter, has expressed his happiness to hear from me again, I proceed to answer him, and will take up his objections seriatim.

In the first place, he accuses me of not appearing to understand him. This accusation I do not consider of much importance, considering that he was sufficiently obscure in his communication, which appeared in your journal, to leave me in a state of doubt.

Dr. C. thinks it *desirable* that ridiculous theories should be propounded. I agree with him that it is not wonderful but merely simple and natural that they have been, are, and will be, promulgated, but, in my opinion, I think that they are not at all to be desired or sought after.

If ridiculous theories were not propounded, Dr. C. says that man's intelligence would remain at a stand-still, and science make no progress. I am sorry here again to pause and disagree with him. I think that man's intelligence would be more successfully cultivated, and science make more rapid strides towards the discovery of truth, if there were no such restraints as pet theories, or absurd conceits, or hobby-horses, or coloured spectacles in existence at all.

Dr. C. does not clearly see that I have the right to assume the position of a critic. I believe that I have a perfect right to criticise any communication which appears in the public prints ; if not, why not? Are the results of experiments,

cases, &c., which are published in the medical journals, not open to criticism? I was always under the impression that they were. Perhaps I am wrong, but I believe that every man who brings before the public any communication, of whatever nature, is open to criticism. If I misunderstood Dr. C., it was his duty to set me right, without informing me that I had no right to criticise his theory—this addition was altogether unnecessary and superfluous.

Dr. C. says that he has laboured for thirty years, and implies that I think he has been mistaken during all that time. I don't think anything of the kind. It is not the results of his experiments I attack, which, if the experiments themselves have been conducted accurately, can lead to nothing else but true results, and will, therefore, be incontrovertible facts, but it is his theory which I think he makes rather *universal*, and which I object to, and with which I have to do.

Dr. C. talks of Pythagoras, Galileo, Harvey, and Jenner. What relation they have to the subject under discussion, I am unable to see, or what he wants to prove from the short extracts that he gives concerning them, I can't for the life of me understand.

The point about which I was in doubt, Dr. C. has cleared up by telling me that I was quite correct in supposing that he would put electricity in the place of what Hunter called the "materia vital," or Müller the "organic force." Only he would term it the "vis universalis," since, in his opinion, all the phenomena of the universe—vegetable and animal—owe their life to this subtle fluid, which is everywhere, and permeates all created nature. Now, I believe this is only another erroneous theory which Dr. C. will get the credit of contributing to the already too voluminous store of absurd conceits; and hereafter Dr. Caplin's "vis universalis" may be talked of in the schools, and enumerated among the other theories which have been long since exploded, and consigned to oblivion.

I am very well aware that no decomposition takes place in nature without the evolution of electricity, and that, when it is evolved, it is capable of being put to a useful purpose, and acting as a power. So far, I agree with Dr. C. that it is effect and cause, and cause and effect; but the real point at issue between Dr. C. and myself is that he maintains that it is effect and cause, and cause and effect, in the *human body*. I agree with him that it is an effect of the chemical and chemico-vital processes which are continually taking place in the animal body; but I totally demur to the assertion that it is also a cause of any process whatever which takes place in the human system.

I may be wrong, and Dr. C. right, but I think myself perfectly justified in being a little incredulous as to Dr. C.'s assertion until the proof be forthcoming.

Let Dr. C. only prove that any process, however trifling, takes place in the human body as a result of electricity, and I will rest satisfied, and be very much obliged to Dr. C. for instructing me on this point.

If I at any future time happen to be in Dr. C.'s neighbourhood or vicinity, I will favour him with a visit to his establishment, and will feel grateful and obliged to him for his courtesy and kindness, and will, I have no doubt, profit by the visit.

In conclusion, I have only to thank Dr. C. for his letter, which does not seem to be written in a spirit of animosity, nor is it interspersed with invective or inuendo, but to be composed in a cool and collected manner.—I remain, sincerely yours,

GEORGE WM. THOMPSON.

LICENTIATESHIP OF THE KING ÁND QUEEN'S COLLEGE OF PHYSICIANS.

TO THE EDITOR OF THE MEDICAL PRESS AND CIRCULAR.

SIR,—Through the medium of your excellent paper, I should wish to ask the President and Fellows of the King and Queen's College of Physicians, is it allowable for those possessing the License of that College to sign themselves members of it? It has been explained in your journal of April 3rd, that the Licentiates' degree in the Colleges of Physicians of London and Edinburgh is almost equivalent to a membership of Apothecaries' Hall, and that those possessing it can make up medicine, and sue for it under the "Tradesman's Act." Now, in the King and Queeen's College of Physicians of Ireland, after each candidate passes his examination, and before he receives his License he is required to make a declaration to the effect that he will not compound medicine or engage in trade in any part of the United Kingdom. Under these circumstances surely a Licentiateship of the Dublin College is equivalent in rank to a membership of the London and Edinburgh ones, and being so, why do not we Dublin Physicians enjoy the same title as our English and Scotch brethren?—Yours truly, M.? K. & Q.C.P.I.

[Our Correspondent is slightly in error as to the terms of the declaration subscribed by candidates for the license of the King and Queen's College of Physicians in Ireland. The candidate declares that he will not compound or dispense medicines *for sale;* but there is nothing to hinder him supplying medicines to his own patients, provided he does not charge for them. There is just one reason why a Licentiate of the K.&Q.C.P.I. cannot call himself a member, and that is because it would be illegal to do so. The Charter of William and Mary confines membership of the corporation exclusively to the Fellows; and not only so, but it limits the number of Fellows to *fourteen*. Lucas's Act, I. Geo. iii., cap. xiv., while removing the limitation as to numbers in the case of the Fellows, expressly speaks of them, and of them only as "members." It is even so as regards membership with the Royal College of Surgeons in Ireland, whose present Fellows correspond to the "members" under the original charter of that body. The distinction between the Licentiate of the K.&Q.C.P.I. and the Licentiate of either of the other Colleges of Physicians, and the analogy between the License of the Dublin College and the Membership at London and Edinburgh, are so well understood by the Profession, that our correspondent need have no fear on these heads.—ED. M. P. & C.]

"BLACK DEATH."—DR. BENSON'S CASE.

TO THE EDITOR OF THE MEDICAL PRESS AND CIRCULAR.

DEAR SIR—In your last issue, my friend Dr. Benson published an interesting case of that prevalent and fearful malady, commonly called "Black death." He has ably described his patient's morbid condition in life, and the post-mortem results. I beg, however, to take exception to some of his conclusions, in which I feel concerned. In his summary of the case he says: "To the theory of those who are of opinion that this disease is connected with cerebro-spinal meningitis, this case at least lends no support." The theory referred to was, I believe, *first* advanced by me in connexion with a case of "Black death," which I inserted in your excellent paper of June 13th, 1866. This theory has found favour with many, and with some has been made a basis of treatment, the only real value of any theory. But it appears to me that Dr. Benson's case as reported by himself, proves, in a remarkable degree, "a connection of the disease with cerebro-spinal meningitis." How otherwise can we explain those symptoms of his case. The patient "was dull, drowsy, and stupid;" "did not answer when spoken to;" "his fists were clenched;" "had considerable jactitation;" "had twice . . a convulsion." Again, observe the post-mortem appearances after those symptoms. "Rigor mortis rendered the extremities quite rigid;" "the dura mater presented an unusually bluish tint;" "its sinuses and veins were unnaturally distended;" "veins on the surface of the brain a good deal congested;" "brain slightly softer than is natural, but scarcely congested;" "a drachm of bloody serum" in each lateral ventricle; "choroid plexus congested." "The spinal cord presented appearances similar to those of the brain;" "sinuses very much congested;" veins on the surface of the cord turgid throughout."

The absence of meningeal adhesions and thickening, adventitious membranes and effusions, are not necessary to prove the existence of meningitis, which precedes, and may create these products, should the patient survive long enough. In this case, as in mine, I am of opinion death resulted not from meningeal inflammation, but from capillary congestion and hæmorrhage, and this from the loss of power of the vasi motor nerves, the cerebro-spinal overbalancing them. I remarked in my paper that implication of the cerebro-spinal and sympathetic systems formed a prominent and early feature in the disease.

I agree with Dr. Benson that the term "black death" is appropriate to the present disease, so far as the fatality and the blackish spots identify it with the "black death" of the middle ages. In my case, however, there was another point of similarity—namely, bloody expectoration. In Dr. Benson's case, this condition might have arisen had the capillary effusion been greater during life, as the post-mortem showed. "On the surface of the lungs, and throughout their substance, were found numerous well-defined black spots of the character of punctiform melanosis. There was slight congestion of the lungs."

Dr. Benson is inclined to class this strange malady with "malignant purpura." I am disposed to adopt Dr. Lyons' opinion, who defines it as, "the algide stage of an essential

zymotic febrile condition, the further development of which is as yet undetermined; and, with cholera sicca alone can it be compared."

Several cases of this alarming disease preceded the recent outbreak of cholera in this country, and may we hope the cases now occurring do not presage a renewal of that scourge, or of some kindred visitation.

Hoping the foregoing remarks may elicit further useful enquiry upon this important subject, and with thanks for your invariable courtesy to me.—I am, faithfully yours,

P. C. Little, F.R.C.S.I., &c.

OINTMENT OF IODIDE OF POTASSIUM.

TO THE EDITOR OF THE MEDICAL PRESS AND CIRCULAR.

Sir,—In the "Report of the Progress of Pharmacy," at page 407, in your last number, under the above heading, it is stated "Mr. Mohr proposes to prevent the brown discolouration of *ointment of iodide of potassium*, by adding hyposulphite of soda to the ointment." I think a question arises, which it would be well to have answered, as to the probability of the efficacy of the ointment being neutralized as well as the colour.

It is well known that by the combination of tincture of iodine and a solution of hyposulphite of soda (called the "iodine process") the ink-like stains of nitrate of silver may be eradicated. Chemically, the hyposulphite of soda neutralizes iodine; whether medically it has the same effect, is a question for your readers to answer.—I am, sir, your's very truly, Chemicus.

NURSES' TRAINING INSTITUTION.

TO THE EDITOR OF THE MEDICAL PRESS AND CIRCULAR.

152, St. James's-street, April 27, 1867.

Sir,—Will you allow me space to make known that in consequence of a change of Superintendents of the above Institution, all applications for nurses are at present to be made to Miss Harricks, 152, St. James's-street.

One of the nurses belonging to the Institution has lately been employed for twelve weeks under Dr. Butcher, President of the Royal College of Surgeons, in nursing a severe surgical case, and has returned to the Institution with the highest testimonial from him. He writes—"I willingly recommend her to others, as I do not think a better nurse could be procured."—I remain, sir, your obedient servant,

Thomas Cooke Trench, Hon. Sec.

ON THE THERAPEUTIC ACTION OF HENBANE.

TO THE EDITOR OF THE MEDICAL PRESS AND CIRCULAR.

Sir—In reply to a query from one of your correspondents in your number of the 20th of March last, who represents himself as in a dilemma respecting the properties of hyoscyamus, I beg to say that I am of the opinion of those who consider it to be one of the *best narcotic sedatives* that we possess, though others seem to attribute to it no therapeutic action whatever.

I have myself employed it with great advantage on many occasions. The only question to ascertain is whether the samples possess the virtues and qualities of the herb. We all know that medical organic or vegetable substances lose their properties sooner or later. Hyoscyamus is one of those which become deteriorated the soonest—the component parts being in many circumstances disintegrated; while, on the other hand, if the herb is not gathered in the proper season, that is just when it is at maturity, and before the evolution of the sap begins to progress downwards, it may retain little or no virtue at all. Its properties may be annihilated again if it is not properly dried before chemical decomposition has taken place; and even when carefully prepared, either in the shapes of extract or tincture, it appears that the preparations become inert in the course of six months.

Rupus Usher, Esq., a grower of medicinal herbs, informs us that he has paid special attention to the cultivation of the henbane which grows in Europe. He says that there are many varieties of the herb; but that the German species, though so fine in appearance, possesses very little or no medical property. The English one, however, is possessed of all the therapeutic qualities which characterise this medicament, if gathered in due time, and properly preserved.

Henbane is a biennial plant, which acquires still stronger properties in the second year of its growth. The best means of appreciating its virtue is by its flavour and aroma, which, in reality, constitute its influence as a medicine upon the nervous system.

It appears that in America, where both the soil and temperature are more favourable for the development of all kinds of plants, that hyoscyamus enjoys amongst others the privilege of that country.

Dr. W. Beach, who has published a volume of pp. 600 on Medical Botany, describes the properties of henbane as follows:—"It is a strong narcotic, very poisonous, and often proves fatal when taken by mistake. The symptoms produced by an overdose are, giddiness of the head, great thirst, dimness of sight, raving convulsions, risus sardonicus, coma, &c.

"Dr. B. S. Heath, an authority well entitled to respect, read a very interesting paper before the National Eclectic Medical Convention of 1848, upon the therapeutical properties of this plant, the substance of which we extract from the *Western Medical Reformer*. He states that he had been prejudiced by his early medical education against the use of all narcotics, but had recently adopted eclectic principles, and found that narrow proscriptive theories were not adapted to Medical practice." He also mentions seven cases in which hyoscyamus was used with the greatest success:—

1. A Thompsonian practitioner, who was suffering severely from asthma, and could not be relieved by all the resources of Thompsonianism, was alleviated in ten minutes by the exhibition of the extract.

2. A case of pleurisy, accompanied with violent pains and difficulty of breathing, completely relieved in two hours by the same, and hot fomentations of the plant.

3. A severe attack of pleurisy with pungent pain, in a farmer, aged fifty, relieved and cured by the same.

4. A case of severe pain, irritation, and restless wakefulness in a lady, two weeks after accouchment, relieved in three hours, by doses of half-a-grain, once every hour.

5. A case of violent pain and muscular spasm, which had resisted all other means, was frequently relieved by hyoscyamus, in from thirty to sixty minutes.

6. In a similar case of sleeplessness for seven days and nights, the henbane gave relief.

7. In several severe cases of after-pains, it was also very successful.

Dr. Heath dissolves twenty grains of the ext., in ℥iv. of water, and gives one or two teaspoonful every ten or fifteen minutes, discontinuing it as soon as the pain is abated. This he uses in all cases accompanied with pain, either inflammatory or spasmodic.

Employed *externally*, or in the form of a poultice or fomentation, it is beneficial in all cases of painful and obstinate inflammation, such as fistulas, boils, swellings of the breast, scrofulous ulcers, indolent tumours, inflamed eyes, and cramps in the bowels. In deep-seated inflammation of the kidneys, bowels, testicles, &c., this poultice is very useful, and seldom fails to produce a beneficial result. Indeed, no better application can be found for many painful affections.

So far we have the testimony of a gentleman of great experience and extensive knowledge. Dr. Beach has travelled amongst almost all civilized nations, and visited all the Hospitals as he went through. He has been honoured with fifteen medals, by the Sovereigns of the various countries which he has visited. Among his literary contributions he has published his great work, in three large volumes imperial 4to, of pp. 1200 each: the one on Botany, one on Medicine, and the third on Surgery, which is a proof of the extent of his researches in medical science, and of the authority to which he is entitled as a master.

We find again very valuable references and instructions in a work published at New York by Grove Coe, M.D., on the "Concentrated Organic Medicines, and Officinal Preparations" of B. Keith and Co., chemists of great eminence, who have undertaken to ascertain, by decomposition, the elements which constitute the virtues of medicinal plants, separating them by a new process of analysis and synthesis. They have thus acquired a superior knowledge of the compound substances and the properties of organic medicines.

These preparations, which have lately been introduced into London, are not as yet adopted in the "British Pharmacopœia." It is to be hoped, however, that the time will come when they will be received in general practice, and that the profession will become better acquainted with their value.

Dr. Grove Coe, who has experimented upon all the pharmaceutical preparations of Messrs. Keith, gives the exact value of every medicinal substance. What he says respecting henbane, confirms so exactly the description I have given above of the properties of that plant, that I need not repeat it. Enough has been said to establish the value of this precious remedy as a narcotic, when duly prepared from genuine sources.

I have alluded, in the above remarks, to the eclectic American practice, a system, which, in my humble opinion, is not sufficiently appreciated. My reason for thinking so is founded upon the belief that nature has provided the vegetable kingdom, which is organic, for the formation, the development, the restoration and healing of the organism of the animal kingdom.

In my reply to Mr. Thompson, of this week, I observed that we should not discard any kind of system, without having first given it an unprejudiced and careful investigation. Is man to stand still in his researches? Can we philosophically admit, that we have arrived at a perfect standard of medical knowledge, and that we have nothing more to attempt for the future? We have the English materia medica. Is this perfect? We have in France the codex. Is that more complete? We have in Italy Rosari's system (the best no doubt for appreciating the general characteristics and *modus operandi* of medicinal agents)—but is this perfect?

The work published by Dr. Giacomini on that subject, in French, seems to be unknown in this country. Why should we confine ourselves to the region of our birth?

Socrates used to say—"I am a citizen of the whole world." Why should not medical men be the same, as the whole earth belongs to every single inhabitant of it?

I shall conclude with a quotation from Dr. Bover Dodd, of America (the author of the "System of Psychology"), who says:—"The best system is that one which is composed of the best of every system."—I remain, sir, yours faithfully,

J. Caplin, M.D.

Medical News.

University of London.—The Senate of the University of London elected the following gentlemen as examiners for the year 1867-68:—

Classics.—F. A. Paley, M.A., and William Smith, LL.D. Mathematics and Natural Philosophy.—Edward John Routh, M.A., and Isaac Todhunter, M.A., F.R.S. The English Language, Literature, and History.—Rev. Joseph Angus, D.D., and Christopher Knight Watson, M.A. The French Language.—Rev. P. H. Ernest Brette, B.A., B.D., and Theodore Karcher, LL.B. The German Language.—F. Althaus, Ph.D., and Prof. Buchhein, Ph.D. The Hebrew Text of the Old Testament, the Greek Text of the New Testament, the Evidences of the Christian Religion, and Scripture History.—Rev. J. J. Stewart Perowne, B.D., and William Aldis Wright, M.A. Logic and Moral Philosophy.—Professor Alexander Bain, M.A., and Edward Poste, M.A. Political Economy.—William B. Hodgson, LL.D., and Professor Jacob Waley, M.A. Experimental Philosophy.—Professor R. B. Clifton, M.A., and Professor G. G. Stokes, M.A., D.C.L., Sec. R.S. Chemistry.—Henry Debus, Ph.D., F.R.S., and Professor A. W. Williamson, Ph.D., F.R.S. Botany and Vegetable Physiology.—Rev. M. J. Berkeley, M.A., and Thomas Thompson, M.D., F.R.S. Geology and Palæontology.—Archibald Geikie, F.R.S., F.G.S., and Professor T. Rupert Jones, F.G.S. Law and Principles of Legislation.—Professor Mountague Bernard, B.C.L., M.A., and John Richard Quain, LL.B. Practice of Medicine.—Professor Edmund Alex. Parkes, M.D., F.R.S., and Samuel Wilks, M.D. Surgery.—Frederick Le Gros Clark and Professor John Eric Erichsen. Anatomy.—Professor George Viner Ellis, and Professor William Turner, M.B., F.R.S.E. Physiology, Comparative Anatomy, and Zoology.—Professor Thomas H. Huxley, Ph.D., F.R.S., and William Scovell Savory, M.B., F.R.S. Midwifery.—John Braxton Hicks, M.D., F.R.S., and William Overend Priestly, M.D. Materia Medica and Pharmaceutical Chemistry.—Frederick J. Farre, M.D., and Samuel Osborne Habershon, M.D. Forensic Medicine.—E. Headlam Greenhow, M.D., and Thomas Stevenson, M.D.

Royal College of Surgeons, London.—The following gentlemen having undergone the necessary examinations for the diploma, were admtted members of the College, at a meeting of the Court of Examiners on the 25th ult., viz:—

Messrs. James Wood Cooke, Barnstable, Devon; Joshua William Morison, Pembroke; William Calvert, Toulmin, Lower Clapton; Arthur Bowles Elliott, Richmond, Yorkshire; Benjamin Duke, Kennington-park-road; Charles Munden, Ilminster; Edward Sunderland, Thornton, Yorkshire; William Jebson Stothard, Manchester, and Charles John Walford Meadows, L.S.A., Otley, near Ipswich, students of Guy's Hospital; Alfred Henry Newth, Albert-street, Newington; Nelson Congreve Dobson, L.S.A., Holbeach; Alfred Peon, L.S.A., Winchester, and William Anderson, L.S.A., Stockwell, of St. Thomas's Hospital; Frederick Augustus Alfred Smith, Cheltenham: William Henry Causton, Woodbridge, Suffolk; and Richard Carcless Sanders, L.S.A., Moulton, Northampton, of the London Hospital; George Percival Hadley, Birmingham; Henry Flamank Marshall, Birmingham, and John Orton, Foleshill, near Coventry, of the Birmingham School; Walter Smith, Hampton Court, and Octavius Twigge Molecey, Stamford, of King's College; Richard Augustus Rouse, Great Torrington, North Devon, of University College; Christopher William Calthrop, Withern Alford, Lincolnshire, of the Charing-cross Hospital; Frederich William Newcombe, Newcastle-on-Tyne; John George Nevitt, Leeds, and Thomas Bartholomew Tracy, M.D., Queen's University, Canada, Kingston, Canada.

The following were admitted on the 26th ult.:—

Messrs. Thomas Andrew Roberts, Shaftesbury; James Goodridge Anderson, L.R.C.P. Lond. and Edinb., L.M. and L.S.A., Theddlethorpe, Lincolnshire; William Henry Wood, Woodhouse Eaves, Leicestershire; and Henry Franklin Parsons, L.S.A., Beckington, Somerset, students of St. Mary's Hospital; Alfred Henry Buck, Camden-town; William Powell, L.S.A., Shirley, Southampton; Adam Wilkinson, L.S.A., Shaftesbury, and John Levitt Davis, Euston-road, of the Charing-cross Hospital; Edmund Wollaston Parkinson, Shere, near Guilford; Philip Henry Mules, Cheddar, Somersetshire; Frederic Richard Fisher, Salisbury; and William Bruerton, Paington, Devon, of St. George's Hospital; Alexander Fox, Stoke Newington; Robert Walter Ceely, Poplar; and Septimus Evans, Devonport, of the London Hospital; Samuel John Truman, Nottingham; William Percival Magor Boyle, Penryn, Cornwall; and Arthur Horatio Morrill, Richmond, Surrey, of Guy's Hospital; Henry Bland, L.S.A., Bradford, Yorkshire; and Daniel King, L.S.A., Stretton, Cornwall, of King's College; Charles Henry Hines, Sunderland, of University College; George Wilks, Ashford, Kent, of St. Bartholomew's Hospital; John James Fraser, Manchester; and William Frederic Taylor, M.D., Queen's University, Kingston, Canada. Out of one hnudred candidates who last week underwent their examinations, only eight failed to acquit themselves to the satisfaction of the Court of Examiners, and were consequently referred to their studies for a further period of six months.

University of Edinburgh.—The annual meeting of the University of Edinburgh for conferring degrees in divinity, literature, and science and arts took place last Wednesday in the hall of the General Assembly, Sir David Brewster, K.H., Principal and Vice-Chancellor, presided, and there was a large attendance of the heads of the University, of the students, and of the public. The degree of D.D. was conferred on the Rev. Thomas Smith, editor of *The Library of Puritan Divines*, and on the Rev. Maxwell Nicholson, Tron Church, Edinburgh. It was also intended to confer the same degree on the Rev. G. Walker, minister of Kinnell, the Rev. David Pitcairn, author of several popular religious works, and on the Rev. Joseph Mullins, of the London Missionary Society, author of *The Religious Aspects of Hindu Philosophy*, but these gentlemen were unable to be present. The degree of LL.D. was conferred on Mr. James H. Stirling, "whose masterly analysis of the *Secret of Hegel* had been welcomed in many quarters as a most valuable addition to the literature of metaphysics," and the degree of Doctor of Science was bestowed on Mr. John Affleck, M.A., of Glasgow; Mr. H. A. Nicholson, B.S., of Edinburgh; and the Rev. Robert Jardine, Master of Arts and Bachelor of Divinity of Queen's College, Kingston, Canada. Nine young gentlemen were presented for the degree of B.D., one for LL.B., and three for Bachelor of Science. Seventy students had passed for the degree of M.A., of whom nine had taken honours. This was the largest number that had yet passed on any occasion, but some of those entitled now to receive the degree proposed to hold back in order to take the degree with honours next year. In the course of the year fifteen students had taken certificates of proficiency in classical literature, sixty-three in mental philosophy, and fifty-seven in mathematics. The address of the occasion was delivered by Professor Sellar, who spoke of the four latest rectorial addresses delivered in the Scottish Universities, and especially remarked Mr. Mill's address that the culture which it recommended was the equalized development of the faculties and intellectual sympathies through literature, science, and philosophy. This was, he said, the aim of the Scottish Universities, which were remarkable for the breadth of education imparted, and for deriving much of their very best materials from classes who, in other countries, would be debarred by the *res angusti domi* from thinking of a University education.

Glasgow University Council.—At a meeting of the Glasgow University Council, held last Wednesday—the Rev. Principal Barclay presiding—an excerpt from the minutes of a meeting of the University Court was read, from which it appeared that that Court had resolved to petition both Houses of Parliament to the effect that the four Universities of Scotland should have the privilege conferred on them of returning at least two members to the House of Commons—one to be chosen by the General Councils of St. Andrew's and Edinburgh, and one by the General Councils of Glasgow and Aberdeen. Mr. J. A. Campbell reported that the subscriptions on behalf of the new University buildings had amounted during the last half-year to £7265, bringing up the total sum subscribed at this date to £89,715.

SOCIETY FOR RELIEF OF WIDOWS AND ORPHANS OF MEDICAL MEN.—(Established 1788; Incorporated by Royal Charter 1864).—Election of officers and directors at the annual general meeting, April 24, 1867:—President: George Burrows, M.D. Vice-presidents: Everard A. Brande, Esq.; Peter Mere Latham, M.D.; John Bacot, Esq.; John Miles, Esq.; Cæsar H. Hawkins, Esq., F.R.S.; James Paget, Esq., F.R.S.; Charles Hawkins, Esq.; Thomas Hammerton, Esq.; Sir Charles Locock, Bart, M.D., F.R.S.; John Propert, Esq.; Henry Alfred Pitman, M.D.; John Clarke, M.D. Treasurers: James Thomas Ware, Esq.; G. Hamilton Roe, M.D. (acting); Richard Strong Eyles, Esq. Directors: John Love, Esq.; H. W. Fuller, M.D.; John Adams, Esq.; Robert Druitt, M.R.C.P.L.; J. C. Forster, Esq.; Edward Tegart, Esq.; John Scott, Esq.; Henry Lee, Esq.; C. Collambell, Esq.; Richard Quain, M.D.; George Johnson, M.D.; C. F. Du Pasquier, Esq.; E. U. Berry, Esq.; Samuel Solly, Esq.; John Morgan, Esq.; Robert Barnes, M.D.; George Budd, M.D.; William Bowman, Esq.; Prescott G. Hewitt, Esq.; W. Tiffin Iliff, M.D.; Richard Partridge, Esq.; G. Owen Rees, M.D.; Francis Sibson, M.D.; Edward Newton, Esq. The following members were elected trustees, to act with James Thomas Ware, Esq., viz.—George Burrows, M.D., the president, in the room of the late Thomas Arthur Stone, Esq., the former president; G. Hamilton Roe, M.D., in the room of the late Alex. John Sutherland, M.D.; and Richard Quain, M.D., in the room of Charles Hawkins, Esq., resigned.

NOTICES TO CORRESPONDENTS.

Dr. Morton.—The candidate must be registered as the holder of a Medical and Surgical Qualification.

F.R.C.S.—The discrepancy is obvious, though it might have led to serious results. You were perfectly justified in treating the case as mentioned.

Dr. P.—"The British Pharmacopœia" is announced to be ready for delivery on May 1.

Medicus.—We have been yet unable to verify the fact stated in the note, as there is no provision for obtaining any Parliamentary Paper from the Agents who profess to keep them in Dublin. We expect the returns from London, and will give them our best attention.

The following communications are unavoidably postponed:—Dr. John Geo. Thornley on "Lodgment of a Coin in the Œsophagus;" Dr. John Hawthorne's "Case of Successful Operation for Strangulated Inguinal Hernia;" "Sanitary Condition of the Federal Army;" Dr. Asbe's letter "On Preliminary Professional Education;" Dr. Patterson's Communication "On Parotitis."

Dr. Kidd, Ballymena.—We cannot ascertain that there is any foundation for the statement to which you refer. We shall feel obliged if you will let us know in what part of the journal it appeared.

Dr. Brown, Belfast.—If correspondent will look again at our review of the pamphlet in question, he will find that our opinion of it was by no means commendatory—quite the reverse; and much on the same grounds as those set forward in his letter. As to outstyling the writer of it "Dr.," we can only say that we adopted the common, but inexact, style of speaking of practitioners generally; and our correspondent must know that many "homœpathists" are quite as much entitled to this title as the best men in our Profession. It certainly never occurred to us that the writer of the pamphlet was not a *legally qualified* quack; and we think the question as to the title is that of least importance in this matter, seeing that the pamphleteer can, if he will, become a German "Doctor in Philosophy" on easy terms, and so place his right beyond dispute. The real question is—did THE MEDICAL PRESS AND CIRCULAR, which has always opposed quackery, give a favourable review of a quack pamphlet? To this we decidedly say *no*. We reviewed it only to expose its real nature; and that in the shortest and most unmistakeable terms.

THE RECENT POOR-LAW INQUIRY AT THE LIMERICK UNION WORKHOUSE.—We publish, in another part of our issue, the letter of the Poor-Law Commissioners, conveying their verdict with respect to the charges against Dr. O'Sullivan. The reply of Dr O'Sullivan and the proceedings of the Board of Guardians with reference to it, came under our notice too late for analysis in this number. We hope to enter on the question next week.

"THE FIELD FUND."

SUBSCRIPTIONS RECEIVED SINCE OUR LAST ANNOUNCEMENT.

Amount previously Subscribed	£180 17 6
G. Burt, Esq.	2 2 0
G. Burnaud, Esq.	5 5 0
E. Barker, Esq.	1 1 0
G. Critchett, Esq.	2 2 0
Dr. Carr Blackheath	1 1 0
W. Cathrow, Esq.	1 1 0
A. B. Carpenter, Esq.	1 1 0
Dr. Falconer, Bath	1 1 0
Major Greenway	2 2 0
Dr. Bathershall Gill	1 1 0
U. P. Harris, Esq.	2 2 0
Dr. Harling	1 1 0
C. Lingen, Esq.	1 1 0
Dr. Morrell Mackenzie	1 1 0
J. Morgan, Esq.	1 1 0
Dr. T. Nicholson	1 1 0
E. Newton, Esq.	2 2 0
Dr. Royston	1 1 0
Dr. Stewart	1 1 0
T. H. Smith, Esq., St. Mary's Crag	1 1 0
Dr. Tanner	3 3 0
G. Turner, Esq.	1 1 0
W. Thomas, Esq.	5 5 0
Dr. Wight	10 10 0
Erasmus Wilson, Esq.	2 2 0
N. B. Ward, Esq.	1 1 0

MEDICAL APPOINTMENTS.

MAY, Joseph, L.A.D., L.R.C.P.E., L.F.P.S.G.L., M.D., has been appointed Medical Officer and Public Vaccinator for the Rathfriland Dispensary District, Newry Union, vice Samuel Swan, L.A.D., L.R.C.S.E., deceased.

SMITH, H. F., M.D., Staff Surgeon, having completed twenty years' full-pay service, to be Staff Surgeon Major. The restoration to full-pay of Staff Assistant Surgeon C. J. Davenport, M.D., has been cancelled, with a view to his continuing upon half-pay for a further period of twelve months.

ALLNUTT, J. F., M.R.C.S.E., has been reappointed Medical Officer for the Landport District of the Portsea Island Union.

DAVIES, A., M.D., has been elected Physician to the West Kent General Hospital, Maidstone, vice Dr. Woodfall, deceased.

DAVY, R., M.R.C.S., has been elected Surgeon to the St. Marylebone General Dispensary.

HARRISON, C., M.D., has been elected Honorary Surgeon to the Lincoln General Dispensary, vice J. Hewson, F.R.C.S., deceased.

HYDE, G. E., L.R.C.P.L., has been appointed Surgeon to the County Gaol, Worcester, vice E. Lowe, M.R.C.S.E., deceased.

NORRISH, J., M.R.C.S.E., has been appointed Resident Medical Officer to the Islington and North London Provident Dispensary, vice Dr. M'Dermott, resigned.

RICHARDSON, B. W., M.A., M.D., F.R.C.P., has been appointed Physician to the London Infirmary for Epilepsy and Paralysis.

SMITH, J., M.R.C.S.E., has been appointed a Surgeon for the Aston District of the Union Provident Sick Society, Birmingham.

SOMERVILLE, W., M.D., has been appointed Medical Officer for the Muncaster District of the Bootle Union, Cumberland.

STONE, J. P., M.R.C.S.E., has been appointed Medical Officer for the Dittisham District of the Totnes Union, Devon.

TAYLOR, T., M.R.C.S.E., has been appointed Medical Officer for the Workhouse, Baintree Union, Essex, vice C. Dixon, M.R.C.S.E., resigned.

TAYLOR, T. T., M.R.C.S.E., has been appointed Medical Officer for District No. 3 of the Cricklade and Wootton Bassett Union, vice Thomas Taylor, M.R.C.S.E., resigned.

TRUBSHAW, A., M.R.C.S.E., has been appointed Junior House Surgeon to the Southern Hospital, Liverpool, vice J. H. Evans, M.R.C.S.E., resigned, on being appointed Hon. Curator to the Liverpool Royal Infirmary School of Medicine.

TURNER, R. S., M.A., L.R.C.S.Ed., has been appointed Resident Assistant to the Extra Physicians at the Royal Hospital for Sick Children, Edinburgh.

TYLEY, R. P., M.D., M.R.C.S., has been appointed Medical Officer to the Wedmore District of the Axbridge Union.

WALKER, H., M.D., has been appointed Medical Officer for District No. 4 of the Beverly Union, Yorkshire, vice T. Sandwith, M.D., deceased.

WARRILLOW, L., M.R.C.S.E., has been appointed Medical Officer for District No. 7 of the Parish of Birmingham.

WATHEN, J. H., L.R.C.P.Ed., has been appointed Assistant House Surgeon to the General Hospital, Bristol, vice J. Wells, M.R.C.S.E., resigned.

WELCH, T. D., M.D., has been appointed Physician to the Kent and Canterbury Hospital, Canterbury.

WILCOX, R. W., M.R.C.S.E., has been appointed Medical Officer for District No. 5 of the Aylesbury Union, Bucks.

WILSON, G., L.R.C.P.Ed., has been appointed Medical Officer for the Islandshire District of the Berwick-upon-Tweed Union.

WITTEX, E. W., M.R.C.S.E., has been appointed Medical Officer for the Lullington District of the Burton-upon-Trent Union, vice W. Anderson, M.D., resigned.

MEDICAL DIARY OF THE WEEK.

WEDNESDAY, MAY 1.

ROYAL LONDON OPHTHALMIC HOSPITAL, MOORFIELDS—Operations, 10½ A.M.
MIDDLESEX HOSPITAL.—Operations, 1 P.M.
ST. BARTHOLOMEW'S HOSPITAL.—Operations, 1½ P.M.
ST. THOMAS'S HOSPITAL.—Operations, 1½ P.M.
ST. MARY'S HOSPITAL.—Operations, 2 P.M.
GREAT NORTHERN HOSPITAL.—Operations, 2 P.M.
UNIVERSITY COLLEGE HOSPITAL.—Operations, 2 P.M.
LONDON HOSPITAL.—Operations, 2 P.M.
OPHTHALMIC HOSPITAL, SOUTHWARK.—Operations 2 P.M.
ROYAL INSTITUTION—2 P.M. Annual Meeting.
OBSTETRICAL SOCIETY OF LONDON.—7 P.M.—Council Meeting, 8 P.M. Mr. Dunn, "On a Fatal Case of Rupture of the Uterus."—Dr. Barnes, "On Pregnancy complicated with Small-pox."—Dr. Hicks, "On a Case of Extra-Uterine Fœtation."—Dr. Playfair, "On the Treatment of Labour complicated by Ovarian Tumour; and other papers.
SOCIETY FOR THE ENCOURAGEMENT OF ARTS, MANUFACTURES, AND COMMERCE.—8 P.M.

THURSDAY, MAY 2.

ROYAL LONDON OPHTHALMIC HOSPITAL, MOORFIELDS.—Operations, 10½ A.M.
CENTRAL LONDON OPHTHALMIC HOSPITAL.—Operations, 1 P.M.
ST. GEORGE'S HOSPITAL.—Operations, 1 P.M.
UNIVERSITY COLLEGE HOSPITAL.—Operations, 2 P.M.
WEST LONDON HOSPITAL.—Operations, 2 P.M.
ROYAL ORTHOPÆDIC HOSPITAL.—Operations, 2 P.M.
ROYAL INSTITUTION—3 P.M. Prof. Huxley, "On Ethnology."

HARVEIAN SOCIETY OF LONDON.—8 P.M. Mr. H. Power, "On Ulcers of the Cornea."—Adjourned Debate on the "Causes of Excessive Infant Mortality."

FRIDAY, MAY 3.

ROYAL LONDON OPHTHALMIC HOSPITAL, MOORFIELDS.—Operations, 10½ A.M.

WESTMINSTER OPHTHALMIC HOSPITAL.—Operations, 1½ P.M.

ROYAL INSTITUTION.—8 P.M. Prof. Blackie: "Music of Speech in the Greek and Latin Languages."

SATURDAY, MAY 4.

ST. THOMAS'S HOSPITAL.—Operations, 9½ A.M.

ROYAL LONDON OPHTHALMIC HOSPITAL, MOORFIELDS.—Operations, 10½ A.M.

ST. BARTHOLOMEW'S HOSPITAL.—Operations, 1½ P.M.

KING'S COLLEGE HOSPITAL.—Operations, 1½ P.M.

ROYAL FREE HOSPITAL.—Operations, 1½ P.M.

CHARING-CROSS HOSPITAL.—Operations, 2 P.M.

ROYAL INSTITUTION.—3 P.M. Prof. Huxley, "On Ethnology."

Births, Marriages, and Deaths.

Announcements are inserted without charge, and must in all cases be authenticated with the signature of the sender.

BIRTHS.

AICKIN.—On the 15th ult., the wife of W. Aickin, M.D., of Belfast, of a son.

ARNOLD.—On the 22nd ult., at Fountainville-terrace, Belfast, the wife of Dr. Wilberforce Arnold, L.K.Q.C.P.I., of a son.

BOWER.—On the 17th ult., at Clarence Villas, Windsor, the wife of Edmund Bower, M.D., of a son.

CÆSAR.—On the 18th ult., at Downton, the wife of R. T. Cæsar, M.R.C.S.E., &c., of a son.

COWAN.—On the 27th March, at the Green Mountain Hospital, Ascension, the wife of M. W. Cowan, M.D., Surgeon, R.N., of a son.

DIAMOND.—On the 16th ult., at Dudley Villa, Effra-road, Brixton, the wife of W. H. Diamond, M.R.C.P.Ed., of a daughter.

DIVER.—On the 20th ult., at Reading, the wife of E. Diver, M.D., of a daughter.

HASTINGS.—On the 22nd ult., at Queen Anne-street, the wife of Dr. C. Hastings, of a daughter.

LILLIES.—On the 7th ult., at Chudleigh, the wife of G. W. Lillies, M.D., of a daughter.

MAUNSELL.—On the 10th ult., at Upper Norwood, the wife of Dr. S. E. Maunsell, 97th Regiment, of a daughter.

MILLER.—On the 20th ult., at St. Vincent-street, Glasgow, the wife of Hugh Miller, M.D., of a daughter.

MURPHY.—On the 9th ult., at Dingle, Co. Kerry, the wife of Dr. Murphy, of a son.

REED.—On the 15th ult., at Hertford-street, May-fair, the wife of Dr. Reed, prematurely of a daughter.

SAUNDERS.—On the 16th ult., at Queen-street, Cheapside, the wife of W. S. Saunders, M.D., of a son, still-born.

SHARMAN.—On the 13th ult., at Knight's-hill, Lower Norwood, the wife of J. Sharman, M.R.C.S.E., of a son.

THOMPSON.—On the 24th ult., at Droxford, Hants, the wife of James Thompson, M.B., M.K.Q.C.P.I., L.R.C.S., late Army Medical Staff, of a son, still-born.

WILLIAMS.—On the 14th ult., at Kensington, the wife of Dr. L. Williams, of a son.

MARRIAGES.

EAMES—CARR.—On the 9th ult., at St. Stephen's, Westbourne-park, Henry Eames, M.B., to Jane Catherine, daughter of the late David Carr, Esq.

GRIFFITH—STARBUCK.—On the 11th ult., at Steynton, Dr. Griffith, Surgeon in charge of Troops, Milford Haven, to Mary, eldest daughter of A. B. Starbuck, Esq., J.P., Milford Haven.

HERBERT—GALWEY.—On the 23rd ult., at St. Stephen's Church, Dublin, Henry Carden Herbert, M.D., F.R.C.S.I., 85th Light Infantry, to Isabella Miranda, daughter of Edward Galwey, Esq., of Lower Baggot-street, Barrister-at-law.—Cards not sent.

NEATE—BRADFORD.—On the 24th ult., at Farcet, Hants, Chas. W. P. Neate, Esq., Surgeon, of Yaxley, near Peterborough, to Harriette, only daughter of Samuel Bradford, Esq., of Park House, Farcet.

DEATHS.

BURDETT.—On the 11th ult., W. Burdett, M.R.C.S.E., of Tinwell, formerly of Stamford, Consulting Surgeon to the Stamford and Rutland Infirmary.

COLLINS.—On the 18th March, at Macroom, Co. Cork, James Collins, M.D., late of Liverpool, aged 74.

DARBY.—On the 10th March, at Maddox-street, W. Darby, late Superintending Surgeon Cawnpore Division, Bengal Service, aged 76.

DOLMAN.—On the 15th March, J. D. Dolman, M.D., of Souldern House, Banbury, aged 56.

DYSON.—On the 16th March, J. Dyson, Surgeon, of Hornley, near Huddersfield.

EVANS.—On the 3rd March, W. Evans, Surgeon, of Queen-street, Devonport, aged 72.

FAIRMEAD.—On the 12th March, J. Fairmead, L.S.A.L., of London-road, Enfield, aged 77.

FLEMING.—On the 2nd ult., J. Fleming, M.R.C.S.E., of Orton, Westmoreland, aged 27.

JONES.—On the 20th of Feb., at Gellyglyd, Llanegwad, Carmarthen, [illegible] South Wales, [illegible]es, M.D., aged 76.

KIRKPATRICK.—On the 2[illegible]ch, at Torquay, Devon, T. Kirkpatrick, M.D., of Larne, late Insp[illegible] National Agricultural Schools, aged 62.

O'SHEA.—On the 8th ult., at Kenmare, [illegible] O'Shea, Medical Student, Queen's College, Galway.

PRICKETT.—On the 7th March, G. B. Prickett, [illegible].E., of Bampton, Oxfordshire, aged 38.

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Original Communications.

PARALYSIS: CASES ILLUSTRATIVE OF A NEW METHOD OF TREATING IT BY THE APPLICATION OF COLD OR HEAT ALONG THE SPINE.

By JOHN CHAPMAN, M.D., M.R.C.P.,
PHYSICIAN TO THE FARRINGDON GENERAL DISPENSARY.

(Continued from p. 413.)

THE following interesting case illustrates the propagation of a morbid influence from the medulla oblongata upwards, producing disorder of the cerebrum, and downwards producing paraplegia, and, at the same time, proves the remarkable power of the spinal ice-bag as a remedial agent.

3.—*Case of Paralysis of the lower extremities associated with partial blindness, as well as temporary and partial imbecility.*

H. R., male, aged two years and eleven months, who suffered when five months old from violent and prolonged convulsions, with congestion of the brain, and who was then treated by me successfully by means of ice, was brought to me January 2, 1866, on account of staggering, and so much weakness of the lower extremities, that when he attempted to walk he stumbled, and frequently sank down; his mind was so impaired that it was difficult to elicit from him any answers to questions, or to excite in him any interest in outward objects; he could not see distinctly, and was unable to see or pick up coins if thrown down on the ground before him; the eyes seemed as if almost fixed in the orbits, and the pupils were remarkably immobile. He was also troubled with profuse dribbling of saliva. I ordered a powder consisting of two grains of mercury with chalk, and five grains of compound rhubarb powder to be taken every other night, or less frequently if the bowels should become freely open; also, a saline mixture, to be taken three times a-day, containing a grain of iodide of potassium in each dose. At the same time, I prescribed the application of ice in each cell of the spinal ice-bag, during fifteen minutes three times a-day.

Jan. 18th.—One of the powders was given about every third night, and the ice, owing to the resistance of the child to it, was applied only once in each twenty-four hours, viz.—when he was asleep; his eyes, however, look much more natural, and his mother says he moves them about now; he distinguishes objects better, and is more lively and intelligent than when I last saw him; I then requested the ice to be applied along the lower half of the spine during thirty minutes each night.

24th.—Intelligence and visual power have improved, but the paralysis of the lower extremities has increased: he is unable to walk at all, and during the last few days has scarcely put his feet to the ground. To give five grains of compound scammony powder occasionally, if the bowels should be constipated; to continue the mixture as before; to make a jacket with a linen pouch on the inner side of the back of it, corresponding to the length of the spine, and having filled each cell of the spinal ice-bag, and placed it within the pouch, to put on the jacket thus prepared three times a-day, during thirty minutes. Also, to give the child a warm bath at 100 Fahrenheit each night.

February 1st.—The ice-bag jacket has not only been well borne, but its use has been looked forward to, and welcomed by, the child; he can now walk a considerable distance, the length of two rooms for instance, if led by the hand, and is generally improved and very lively; the pupils move freely under the influence of light; there is, however, slight paralysis of the left external rectus. The treatment last ordered to be continued.

2nd.—Has again become heavy and dull, and was sick this morning. To let the evening application of ice be restricted to the lower half of the spine, and continued during forty-five minutes.

10th.—Is much better in all respects; can walk without being led, and very easily when led by the hand; vision believed to be quite natural; the squinting has ceased; the patient sleeps well, and is in capital spirits; appetite good; bowels open daily without the aid of medicine. He has, however, a little cough, and is slightly hoarse. To omit the ice in the middle of the day, and to continue the warm bath and mixture as before.

24th.—Head quite well; vision continues perfect; patient walks freely alone, but not quite steadily; he has a slight eruption on the face, and flushes frequently. To restrict the spinal ice-bag to the lower half of the spine, and to continue its use three quarters of an hour each morning as well as at night.

March 7th.—The child is thoroughly lively and intelligent; has no ailment except that he is troubled with a dribbling of saliva, and walks with hesitation; he drags the left foot slightly, and seemingly raises the leg somewhat spasmodically. To omit the mixture; to use the aperient powder only when necessary, and to apply ice along the upper half of the spine each morning and afternoon, and along the whole spine each night during thirty minutes.

Three weeks after the last date every symptom from which the child had suffered, except the dribbling of saliva, had completely disappeared. By persistence in the use of the ice, as last ordered, this trouble was soon also overcome, and the child has long continued well in all respects.

In considering the history of this case there are two or three points which deserve special attention:—1st. The resistance which the child offered to the application of the ice, and the way in which that resistance was overcome. 2nd. The changes made from time to time in respect to the parts of the spine to which the ice was applied; and, 3rdly, the action of the ice on the cerebral circulation, and especially in improving the visual power.

From considerable experience I can state confidently, as a general rule, that when in the treatment of any disease ice operates beneficially, its application, far from being painful, is positively agreeable, and generally exerts a peculiarly calming and soothing, as well as tonic, influence. The experience of the present case is no exception to the truth of this statement. The opposition made by the child in the first instance to the application of the spine-bag was merely due, I presume, to fright at an unfamiliar procedure. When the ice was applied at the time the child was asleep he evinced no discomfort, it did not wake him as it would have done had it been distressing; and as stated, when it was applied within the pouch of a jacket, instead of occasioning any discomfort its use was "looked forward to with pleasure and welcomed by the child." I may here observe that in applying ice to children, the use of the ice-bag jacket as above described is invaluable and often indispensable. The little patients if not completely prostrate are so restless and active that the use of the jacket is the only expedient I can think of by which the spine-bag can be retained exactly in its place, without entailing upon the mother or nurse the necessity of incessant watchfulness; for in adopting this treatment the retention of the ice over the part indicated is a *sine qua non:* if the ice is not over the spine but over the side of the chest it will not be doing good but harm; and if, when it ought to be applied to one region of the spine, the lower third for example, it is actually applied to another, the upper third for example, it my produce effects precisely opposite to those intended.

When the patient in question was first brought to me, I came to the conclusion that the symptoms of cerebral disease which, as I found, were associated with coolness of the forehead, were due to abnormally excessive excitability of the upper portion of the spinal cord, including the medulla oblongata, and collateral ganglia of the sympathetic. This conclusion was based mainly on two considerations: *first*, that there was dribbling of saliva, indicative of undue excitement of the medulla oblongata; and, *second*, there was coolness of the forehead, indicative of the vigourous action of the sympathetic ganglia in question, which resulted in keeping the arteries of the cerebral lobes fairly contracted, notwithstanding that the base of the brain was in a state of considerable irritation, which being propagated

down the cord produced the paralysis in question. Hence I decided to apply ice along the upper as well as the lower portion of the spine. It was thus applied daily during eighteen days. At the end of that time the symptoms of cerebral disorder were considerably lessened, but the power of the legs had not perceptibly increased; therefore, with a view of so acting as to combat directly the most pressing symptom, I ordered the ice to be restricted to the lower half of the spine. But although the intelligence and visual power continued to improve, the paralysis of the lower extremities instead of lessening grew worse. In seeking to divine the cause of the latter effect, I came to the conclusion that inasmuch as the direct influence of the cold was probably exerted as high up as the highest dorsal vertebra it exercised a slight dilating influence on the cerebral arteries, while, at the same time, the ice having been withdrawn from the cervical region, the medulla oblongata and other parts at the base of the brain became even more hyperæmic than before the treatment was begun. Hence, as in the first instance, ice was again applied in each cell of the spine-bag, and was then continued thirty minutes, three times a-day. Afterwards, on account of a little hoarseness and cough, I omitted the ice at noon, and at a later date restricted it, when applied in the evening, to the lower half of the spine, because, *cæteris paribus*, when thus applied it is most conducive to sleep.

At a still later date, in consequence of a slight eruption and frequent flushing, I ceased the application of cold to the upper part of the back in the morning as well as in the evening. These symptoms having disappeared (and it is worthy of observation that while the cold was withdrawn from the upper part of the spine, the power of walking was impaired again) I ordered the ice to be again applied each morning and afternoon along the upper half of the spine, and along the whole spine each night. The satisfactory results seem to show very clearly that the real source of the malady was hyperæmia of the upper part of what Dr. Marshall Hall calls "the true spinal cord," and of the collateral sympathetic ganglia as I inferred in the first instance.

The last point in this case to which I shall advert is the effects of the treatment described on the eye. It will be remembered that the child, when brought to me, was partially blind, the eyes seeming to be fixed in the orbits, and the pupils being remarkably immobile. Now, this condition of fixedness of the eyes was presumably due to a slightly spasmodic condition of the occular muscles—a condition, which, itself, would originate in hyperæmia of the base of the brain, and the persistence of which would be favoured by a like vascular state of the sympathetic ganglia controlling the arteries of the orbits, as well as those of the cerebral lobes and eye itself; for a slight contraction of those arteries, thus diminishing the supply of blood to the muscles in question, would be favourable to the production of spasm. Moreover, the immobility of the pupil, though it might be caused either by disorder of the nervous centre presiding over its contraction, or by disorder of the cilio-spinal region, whence originate the nerves affecting the dilatation of the pupils, was, in all probability, produced by a congested condition of both centres simultaneously. If so, the iris would be maintained by the antagonistic influence of the two sluggish forces in the immobile state, neither extremely contracted, nor extremely dilated, in which it was found. These views respecting the cause of the condition of the occular muscles and of the iris are confirmed by the results of treatment in respect to vision itself. Of course it is probable that if that condition were due to the cause alleged, that same cause would operate in producing abnormal contraction of the retinal arteries, and consequently in diminishing the nutriment of the retina, or, in other words, in establishing partial amaurosis, which I feel confident was the actual state of the eyes in this case. This disease, when due to a proximate cause of the kind just explained, would, of course, be most likely to be relieved or cured by the application of ice along the upper third of the spine; and as the sight in this case was completely restored by this method, the result goes far to prove that the diagnosis was correct. It would be scarcely possible to exaggerate the importance of the therapeutical discovery which the facts of this case tend to establish, and which, I am happy to say, has been proved to be indubitable by my experience in several other cases, in which vision has been wonderfully improved in a similar manner, as well as by the experience of Mr. Ernest Hart, who, kindly acting on my suggestion, has verified the great curative power of cold and heat applied along the spine in the treatment of eye affections. Of course these facts being established, the power of exciting a controlling influence over the internal carotid, and therefore over the cerebral circulation, by modifying the temperature of the spinal region, is proved to be now within reach of the physician.

4.—*Case of Tetanoid Paralysis of the four extremities.*

A boy, aged two years and four months, was brought to me, April 10, 1866, suffering from rigidity and immobility of the extremities. The arms were stiff, though still partially movable; the thumbs were forcibly bent within the palms of the hands, and the fingers were drawn over them and fixed in a state of semi-flexion. The legs were extended and rigid, the feet being also firmly fixed as in *talipes equinus*. All four limbs were swollen; the dorsum of each foot so much so as to make the skin tense and glistening. There were also slight ecchymoses on the feet. The sensibility was extremely heightened: touching the hands or feet caused the child at once to scream; in fact he screamed if he saw his feet approached. He also suffered from diarrhœa.

I ordered the application of ice by means of two ten inch spinal ice-bags—one being placed along the spine, and the other across the occiput, extending from ear to ear, thus forming an ice-pillow. The applications were continued about two hours, and were repeated in the same manner, four times each day, during the early part of the treatment. Afterwards the applications were less frequent. The child was immediately soothed, slept well the following nights, and rapidly became generally calmer and better. On the 12th the fingers had become more supple; the extremities could be freely handled without causing pain, and the diarrhœa had ceased. By the 25th he could walk the length of a room, and by the 2nd of May he was able to walk with perfect ease, and, indeed, had completely recovered, except that there was a slight eversion of the left foot, which has since disappeared.

The severe inflammatory condition of the spinal cord, characteristic of this case, is one which, so far as I know, is incapable of subjugation by any of the ordinary methods of treatment hitherto practiced. I may observe here that my experience in several cases has enabled me to ascertain precisely what is the significance of that remarkable phenomenon often associated with disease of the spinal cord, viz.—a feeling of constriction, or of a tight band round some part of the trunk of the body. It consists of slight spasm of those muscular fibres related to the spinal nerves, which happen to originate in that part of the cord which is peculiarly hyperæmic, and which, therefore, is transmitting from a limited area of nerve-cells a superabundance of motor-impulses to the muscular fibres in question. By the application of ice over the affected part of the spinal cord, the symptom is made to subside, while, on the other hand, it may, in some cases, be induced by the application of heat to the spine. It has occurred temporarily on several occasions in patients not paralytic, but who were being treated by me on account of diseases which necessitated the use of heat. This case is particularly instructive as an illustration of several important doctrines forming part of the pathological views which I advocate. And first, as to the essential nature of inflammation, the proximate cause of which I conceive to be, as stated in the introduction to my work on *Diarrhœa and Cholera*, a vehemently intense activity of the whole or of some part of the spinal cord. Believing, as I do, that the elements of every tissue in the body are under the influence of this great centre, depend upon it for their electro-chemical force, by which they select from the blood their appropriate nutri-

ment, and may thus become more or less vitally active, accordingly as they receive a greater or less amount of stimulus from the cord, I regard the swelling and allied symptoms which took place in this child, as an example of preternatural nutrition due to excessive energy of the intensely excited spinal cord. During about a month previously to the date when the child was brought to me, he had seemed to become generally and rapidly stout ; so rapidly, indeed, that the nurse felt concerned in observing this change, although she had no idea that it was a morbid one. She particularly noted that not only were the limbs increased in size, but that the child had acquired a "double chin." The temperature of the limbs, as I have already stated, was abnormally high. As, owing to the influence of the ice along the spine, the extreme spinal hyperæmia became gradully subdued, the general swelling of the little patient steadily subsided. By the 14th April, I was enabled to enter in my note-book : "he looks more natural ; less puffy and swollen generally ;" and, by the 18th, I was enabled to say, "the general swelling has so much subsided, that he looks considerably thinner, and the expression of his face is proportionably improved." That this symptom, swelling, was due to a hyperæmic state of the cord, bordering on inflammation, seems to me, apart from the theory I hold, fairly demonstrable by two facts,—First, there was intense hyperæsthesia all over the body, a phenomenon ascribed, I believe, by every one except Dr. Bland Radcliffe and his disciples, to hyperæmia of the spinal cord ; and, second, the application of ice over the cord, a procedure calculated to subdue hyperæmia of that organ, if it existed, did actually subdue the general swelling from which the little patient suffered.

Another important symptom in this case was diarrhœa. The child had, on several occasions, suffered from this malady, which in each case was induced by dental irritation, which, as is generally conceded, is a fruitful source of extreme cerebro-spinal excitability. Now, on each of these occasions the child had been rapidly soothed, and the diarrhœa completely stopped by means of the spinal ice-bag. During several days before I saw him, when he was suffering from what I have called tetanoid paralysis, he had been troubled with diarrhœa, a disease which, as I have endeavoured to demonstrate in my work already mentioned, can never supervene, whatever may be its ultimate cause, without the intervention of an excessively hyperæmic state of those segments of the spinal cord immediately related to the bowels. That this state existed in the present case, I have shown by evidence just adduced, and that it was in this case the proximate cause of the diarrhœa may be fairly inferred from the fact that the abolition of the hyperæmia in question resulted in the speedy cure of the diarrhœa.

I will close these comments by adverting to the interesting and very important evidence which the case affords, of the great power which we possess in the form of the spinal ice-bag, of subduing that intolerably intense sensitiveness often observable in patients suffering from what are called diseases of the nervous system, and which was a remarkably prominent feature in this case. The child when first seen was so fearful of being touched, particularly on the feet, that he screamed if he saw them approached. The first night after the ice was applied he was greatly soothed and slept well, the excessive sensitiveness steadly declined, and at the end of a week, after the treatment began, he could bear the soles of his feet to be freely pressed upon without suffering pain.

The efficacy of this method of treating paraplegia is strikingly attested by the statements contained in the following letter addressed to me by a disinterested witness who was previously unknown to me:—

5.—*Case of Paraplegia, involving loss of sensibility as well as of motor power.*

"Guestling Lodge, near Hastings, Sussex.
9th January, 1864.

"Sir,—Having given some attention to the subject of paralysis during twenty years' service in India, and lamenting, as we all must do, our comparative want of success in its alleviation, I was much interested by your paper in *The Medical Times* of October 17th, 1863.

"I am not in practice, being at home only on furlough, but I heard of a girl in the neighbourhood who was bedridden from paraplegia, and I was requested by her mother to visit her, although the case had been pronounced hopeless.

"I found her incapable of turning in bed, all motion and sensation absent from a little above the knees downwards.

"There was great tenderness of the spine in the lower cervical and in the dorsal region.

"General health was good, menstruation natural.

"I applied ice to the spine daily with frictions, and in ten days sensation commenced in the feet, followed by slight motion. Steady improvement has taken place. She has risen from her bed, and on Christmas day I had the satisfaction of meeting her walking in the village street of Orr, in which she resides, at No. 3, Caroline-place. I intend, if possible, getting her case from the Infirmary in Hastings, where she was for some time under treatment, and I shall be happy to have some conversation with you upon the subject, at some future date, before I return to India.—Yours truly, F. Broughton F.R.C.S.
Surgeon-Major, Bombay Army."

I may add here that Dr. Russell Reynolds mentioned to me a case of complete paraplegia in which a cure had been effected by the spinal ice-bag, and with a rapidity even more astonishing than that distinguishing the case just related.

(To be continued).

CASE OF SUCCESSFUL OPERATION FOR STRANGULATED INGUINAL HERNIA, WITH SOME UNUSUAL COMPLICATIONS.

By JOHN HAWTHORNE, M.D., L.R.C.S. Ed.

A. G., æt. 50, a fireman in our gas works, has suffered from right inguinal hernia for 20 years. On Sunday December 21, 1865, while moving about the house at mid-day, having on no truss at the time, he took a violent fit of coughing, which forced down through the right inguinal canal a much larger hernial protrusion than usual. He became sick and faintish, lay down until the faintness passed off, and then made ineffectual attempts to reduce the hernia. Violent and continuous vomiting set in about 2 P.M., severe and spasmodic pain, and difficult respiration. I was asked to see him about 2·30, and found him suffering from severe pain in the tumour, and over the lower part of the abdomen—swelling filling the right side of the scrotum, very tense, and evidently very tightly constructed. The scrotum was considerably ecchymosed from the free handling and efforts of the patient to reduce the hernia. Tried the taxis, but the tumour was become so painful that he could not bear it to be handled. Sent for a medical friend Dr. Rowan. We agreed to give him chloroform, as we had no means of giving him a warm bath, and the man was become so weak we could not think of reducing him further with antimony or tobacco enema. He was placed fully under the influence of chloroform, but we could not by any justifiable force succeed in reducing the hernia. When he awoke we told him the necessity of a further operation, and he at once consented. We got him placed on a table in a good light, and at his own request gave him the chloroform again. Shortly after the commencement of the inhalation, I observed the respiration cease, the chloroform was withdrawn, and cold water dashed over the face and chest, and the tongue drawn forward. After the interval of a few anxious seconds respiration again commenced, and the patient was restored to consciousness. The operation was then commenced without the further use of the ænesthetic. The stricture was found at the external abdominal ring. The edge of the knife was pressed against it, without any sawing motion, and the stricture divided. Still the hernia could not be reduced, the incision

was slightly increased, the sac was not opened, and now the hernia passed up with the usual garguilement. The external wound was brought together by four points of interrupted suture, water-dressing, a compress and bandage were applied, the patient removed to bed, and a full opiate administered.

10 P.M.—Same night, patient felt better; pulse 110, weak; thirsty; tongue dry in centre; some tenderness over ascending colon; had two hours sleep; vomited once; gave him effervescing citrate of potash with two minims acid hydrocy. every four hours, and half grain doses of opium in the intervals of the draught.

January 1, 1866, 9 A.M.—Slept some during night; pulse 100, stronger; tongue very dry in centre; very thirsty; vomited once during the night; felt better, and more cheerful; had slight cough, and on stethoscopic examination detected double mitral murmur; no bronchial rales. Gave him a mixture of ammon. acet. æth. chlor. vin. ipecac. in mist. camph. every four hours, mustard to be applied over the front of the chest.

8 P.M.—Felt better, had a tolerable good day, no vomiting; pain in right side abating; tongue still dry in centre, thirst not so great; pulse 100. To continue the mixture, omit the opium.

2nd, 9 A.M.—Slept some in early part of night, towards morning cough became troublesome; at time of visit, cough constant, short, unable to get up any expectoration; face dusky; pulse 120; very weak, skin soft; respiration very hurried; tenderness extending over right side of abdomen, as high as seventh or eighth rib; diffuse inflamation of the cellular tissue had evidently set in. Ordered hot fomentation over abdomen for half an hour; a linseed meal poultice as hot as could be borne every four hours; to take a mixture of ammon. carb. decoct. senegæ. tinct. opii. camph. every second hour.

The mustard to be re-applied over the front of the chest for an hour; a tablespoonful of brandy every third hour; beef-tea to be given freely during the day, and ol. ricini ℥j. in the brandy at twelve o'clock.

8 P.M.—Breathing easy; cough not so troublesome, getting up some expectoration; bowels not acted on; pulse 110; looks a little better. Gave him an enema of ol. ricini and terebrinth. which acted freely on the bowels, and the patient experienced much relief. The mixture to be given regularly during the night; also the beef-tea and brandy.

3rd, 9 A.M.—Appearance much improved; breathing easier; cough not so troublesome; can expectorate easily; tongue still dry in centre; pulse 100; had several hours good sleep; some discharge of healthy pus from upper end of wound; ligatures withdrawn; lower half healed by first intention; tenderness of side greatly diminished; the mixture every fourth hour; beef-tea and brandy as before.

9 P.M.—Looks much worse; had a rigor during the evening; tenderness over side greatly increased; discharge of pus thin, sanious; sunken expression of face; pulse 130, very weak and intermitting; not able to expectorate; tongue very dry all over; lips and teeth covered with sordes; very restless, and apparently dying. The senega and ammon. mixture to be continued every second hour, with the addition of twenty minims of tinct. digital. to each dose; and every alternate hour, one scruple dose of the bi-sulphide of soda in water, washed down with one ounce of brandy, in hot water and sugar. Mustard to be applied to front and sides of chest for an hour, and, if necessary, to be repeated during the night.

4th, 9 A.M.—Greatly improved; had two hours sleep after 5 A.M.; breathing much easier; little expectoration, and coming up freely; cough easier; had some tea and bread for breakfast before I saw him; pulse 100, full and free from intermission; tongue still dry in centre, moist at edges and tip; wound discharged about two tablespoonfuls of healthy pus; soreness of side relieved, but tender on pressure. Patient feels better and more hopeful since operation; some appetite. Chicken soup and beef-tea, to be given freely; the bi-sulphide every fourth hour, washed down with the brandy as before; mixture to be continued.

8 P.M.—Better; pulse 92; cough better; urine passed freely; a tablespoonful of pus from wound; water-dressing; chlorodyne draught.

5th, 9 A.M.—Four hours sleep; cough not troublesome; expectoration easy; expression of face improved; pulse 84; tongue moist on sides and tip; lower two-thirds of wound healed. Beef-tea and arrow-root during the day; a tablespoonful of brandy every fourth hour; the mixture every sixth hour; half-an-ounce of castor oil at mid-day; omit bi-sulphide.

6th.—Pulse 90; tongue quite moist, brown furring over base; cough a little more troublesome; discharge of pus from wound increased. Mutton-chop and beef-tea. Add one drachm of tinct. of cinchon to each dose of compound senega mixture.

7th.—Pulse 80, full and strong; tongue cleaning; appetite improving; pain in right side increased; fluctuation over ribs; on pressing in direction of wound, about three ounce of pus drained away. Turned patient on left side to allow matter to drain away. Applied compress and adhesive plaister over cavity. To get ol ricini ℥vj. next morning if required.

8th, 10 A.M.—Pulse 76; cough almost better; tongue moist, nearly quite clean; bowels opened; appetite good; quite cheerful and almost well; pain in side better; no discharge of pus; wound granulating.

I need not give the further daily details, suffice it to say the wound was quite healed, and the man up out of his bed on the 12th, and has been engaged at his occupation as a fireman, of course wearing a truss, since 1st February 1866.

I must confess that on the 4th evening after the operation, I had little expectation my patient would recover. There were manifest symptoms of pyæmia, engorgement of the lungs, and failing heart; death seemed imminent, so much so, that I could hardly induce the daughter to apply the mustard, as she thought her father dying.

Was the bi-sulphide useful or not in this case? or was it the tinct. digitalis, by strengthening the weakened heart, and the copious use of stimulants and nutrients, that tided the patient over the danger? Should I meet a similar case again, I would give Richardson's apparatus a trial before operating. I should have stated in the early part of the report, that I had recourse to cold applications to the tumour, but as it is impossible to get ice in a small country town at all times, simple cold fomentation has little effect. I had not Richardson's Apparatus at the time of the operation.

THE PROSTATE GLAND.

INFLAMMATION—ABSCESS—OPENED THOUGH THE RECTUM —SPEEDY RECOVERY.

By P. C. LITTLE, F.R.C.S.I., Etc.

THE prostate gland is so intimately related to the urinary and generative organs, that any affection of it demands the early and earnest attention of the surgeon. In old age, it is frequently the seat of inflammatory disease (as described by Sir Everard Home), and of abscess, hypertrophy, calculous, or cancer. In the earlier periods of life, inflammation of a secondary character is the most usual malady of the organ. Of the causes which induce this condition, gonorrhœa is probably the most fruitful. The following case is an example of acute prostatitis of such an origin, and appears to be of practical interest.

March 25th.—P. G., aged 33, an artist, of low stature, healthy appearance, though subject to rheumatism, consulted me for retention of urine since yesterday, with pain at the rectum, tenesmus, and constipation of bowels—the results, he believed, of cold of a fortnight's duration. A tumour, corresponding in position with the distended bladder, filled the hypogastric region as far as the umbilicus. On examining the penis, I observed that its lips were red, swollen, and adherent with a greenish matter, and that slight pressure upon the urethra, revealed a true gonorrhœal

discharge. His efforts to micturate were painful, and ineffectual. With the intention of emptying the bladder, I endeavoured gently to pass into it a No. 6 gum-elastic catheter, without a stilet, but could proceed no further than the prostatic portion of the urethra, owing to an obstruction there of an abrupt character. I was equally unsuccessful with No. 4. I then tried No. 3. With the point of the instrument I carefully explored around the occlusion for the natural passage, which I discovered, much displaced towards the left side, and elongated posteriorily, as I judged from the urine not flowing, until only about an inch of the catheter remained external to the meatus urinarius. The passing of the instrument through the inflamed region was attended with severe pain, sickness of stomach, and fainting. With great comfort to the afflicted man, I drew off about three pints of dark, fœtid, strongly acid urine, with mucus in solution—a proceeding which I was obliged to repeat night and morning for about a week. I then made a rectal examination, by passing slowly, though with great suffering to the patient, my right index finger well-oiled through the anus, where it was tightly grasped by the sphincter. The recto-vesical wall was hot, abnormally dry, and extremely sensitive. Beneath the prostate, and especially its right lobe, the tenderness was excessive. The wall-tissue and capsule of the gland felt soft and edematous, and deeper pressure conveyed a lobular sensation.

I ordered the prostate to be freely leeched; afterwards hot poultices to the perineum; the emetico-cathartic mixture, slop diet, barley-water, whey, and ice, if agreeable. No stimulants. Rest in bed.

Next morning.—He felt better, though he slept none; his bowels had been well moved; stomach still sick, tenesmus, and throbbing in the rectum; attempts to pass water distressing and useless; urine still acid, and loaded with mucus; prostate cannot bear to be touched. I directed the immediate application of twelve leeches an inch in front of the anus; hot poultices then; a tablespoonful of alkaline mixture, with tr. opii (gtt. xv.) every second hour; hip-bath, and pulv. ipec. co. (gr. x.) at bed time.

Third day.—Feels easier; had a sharp rigor coming on morning; is chilly yet. Continue the treatment.

Fourth day.—Rested none last night; skin burning; tongue furred, brown in the centre; pulse 120, and nervous; frequent tenesmus, and darting pain, recurring every quarter of an hour, in the rectum, followed by prostration, and despondency.

Having placed the patient upon his left side, his knees flexed, buttocks on the edge of the bed, I examined the prostate. Its right lobe was softer, and less sensitive than before. Its centre appeared of a dusky red, through the speculum, which caused much suffering. I passed through the instrument, to nearly three inches from the anus, a long straight bistoury, and, without pain, made a free incision of more than an inch longitudinally through the dark protruding right lobe, by which I gave exit to about two drachms of coagulated blood, ill-formed pus, and a quantity of bloody serum, with much relief to the patient. I then put up the rectum, a half-grain morphia suppository; advised the continuation of the alkaline mixture; poultices; hip-bath and anodyne at bedtime. The diet, as before, with beef-tea added.

Fifth day.—Slept several hours during the night. This morning he complains of an increase of pain in the rectum. His face is flushed; skin perspiring; pulse 116, small and irritable; stomach sick; bowels confined and tympanitic; prostate very painful on touching. The right lobe presents another prominence larger than the first. I opened it, when about a tablespoonful of matter and grumous blood escaped; after which I introduced a suppository. In the evening I advised that the abdomen should be well stuped with turpentine; and afterwards a large enema of gruel, oil, and turpentine, with tr. opii (gtt. xl.), be administered. The rest of the treatment as before. Add to the diet, chop at dinner, and, during the day, two glasses of wine and water.

Sixth day.—Rested pretty well last night. The bowels had been freely moved, and curdy matter and blood smeared the last of the stools. He complains of being restless, exhausted, and very sore in the rectum. No. 6 catheter with ease entered the bladder to day. The speculum brought to light a third small abscess also in the right lobe of the prostate. An incision into it let out some matter and serum, and afforded comfort to the patient.

Without giving further daily particulars of the case, it may be sufficient to say that after a few days the urine flowed naturally, all pain ceased; and, by the application of a strong caustic solution to the prostate, with other suitable tonic treatment, the patient perfectly regained his health, and was enabled to resume his occupation in about a fortnight from the setting in of this serious disease.

The symptoms which this case presents are those which generally accompany prostatitis, and which I may be permitted to summarise thus:—

1. Retention of urine.
2. Pain at lower part of rectum, or perineum.
3. Distressing tenesmus.
4. Throbbing at anus.
5. Sympathetic disturbance.
6. Prostatic tenderness.

These conditions leave little doubt as to the nature of the disease. 1. The retention arises from occlusion of the prostatic portion of the urethra by the inflammation, which may either implicate the whole organ, and so concentrically close up the canal; or, what is more usual, may attack one of the three lobes, and so obstruct and displace the urinary passage. In the present case the latter was pushed to the left side, by the inflamed right lobe. 2.-3. The immediate union of this gland with the lowest portion of the intestine, and sphincter ani, account for the pain in the rectum or perineum, and the tenesmus—so urgent and prominent a symptom. 4. At an advanced period, throbbing at the arms was a remarkable feature. When it exists, we may look upon it as announcing the formation of matter. I have observed that this condition more generally accompanies the formation of matter in certain local inflammations than do rigors. In the case before us, there was only one distinct rigor. 5. The general systemic disturbance in this disease, is probably owing to the peculiar nervous relations of the prostate. It is closely united with the great nervous centres, through the "plexus seminalis" of the sympathetic, which, after supplying the vasa deferentia, and vesiculæ seminales, break up into innumerable minute branches, which ramify upon, and terminate in the gland; and, it is a physiological fact, that sensibility is greatest at the extremities of nerves. 6. Tenderness of the prostate, ascertained by digital examination, completes the diagnosis.

The pathology of inflammation of this gland is still obscure in some respects, although much light has been shed upon it by the investigations of Kölleker, Virchow, V. Ellis, Jarjavay, and other modern physiologists and microscopic anatomists.

We may enquire, by what means gonorrhœal inflammation of the prostate is excited?

1. Is it of metastatic origin? 2. Is the virus communicated to the gland by continuity of surface? 3. Do the veins and lymphatics of the urethra carry the poison to the gland upon which they form a net-work? 4. Is it a rheumatic development of gonorrhœa? 5. Or, is it the effect of two or more of these causes united?

We may reasonably believe that it originates in some of these ways; and, in the generality of cases—is propagated, simply by continuity of surface—the inflammation extending along the urethra to the gland through its numerous excretory ducts. What is the character of this inflammation? Is it erysipelatous? or, phlegmonous? It is difficult to discover any rule on this point. But from analogy, we may infer that inflammation of the cellular covering of the organ, will likely assume an erysipelatous type; while, upon the same principle, inflammation of the substance of the prostate, may be phlegmonous. The products of the inflammation are variable, depending upon the part diseased. Inflammation, in one

case, of the covering of the gland; in another, of its excretory ducts; and, in an other, of the organs of secretion, should not be followed by similar pathological results. A careful examination of, and inquiry into the special circumstances of each case, will assist materially in deciding this point, as well as the others referred to.

Viewing the present case under those aspects, I am of opinion the inflammation was propagated to the substance of the prostate, by *continuity* of surface; was intensified by cold, and the rheumatic diathesis of the patient; was phlegmonous, as the high local and general symptoms, and the good effects of the depressing treatment, manifested. The formation of matter in three distinct chambers was peculiar. Many such divisions are made by the strong fibrous processes which pass from the capsule of the gland through its muscular structure. There is no doubt these processes, and the capsule from which they spring, and which is derived from the strong recto-vesical fascia, constitute a principal obstacle to the resolution, or the easy subduing of inflammation of the structures they so firmly and entirely embrace. This fibrous envelope and net work, moreover, form a basis for rheumatic developments, which so greatly aggravate a case of this nature.

The treatment was, I think, rational, and suggested by the circumstances of the case. My first object was to empty the over distended bladder. In this I succeeded by the careful use of a gum-elastic catheter without stilet, as advised by an able and accomplished Irish surgeon, the late Mr. Rind. I need scarcely remark upon the wisdom of that advice. With this flexible instrument, there is much less danger of making false passages, and much more likelihood of insinuating its point through a distorted and inflamed urethra, than there would be with an unyielding one.

The emetico-cathartic mixture produced most useful aperient and diaphoretic effects. The local blood-letting was not followed by the desired results. Here I may call attention to the propriety of direct leeching of the inflamed prostate, and the necessity of confiding that duty to a qualified person, who will perform it *efficiently*. The question arises, should mercury have been administered? I should be slow to give it in such cases where the inflammation confines itself to the gland. I would not hesitate to do so should the disease implicate the bladder or peritoneum, as sometimes happens.

Early incisions for the evacuation of matter are necessary. Neglect on this point may lead to dangerous consequences; such as extension of the inflammation to important adjacent structures, recto-vesical fistula—the abscess having burst into the rectum, or into the neck of the bladder, forming the nidus for a calculus; irritative fever, pyemia, exhaustion, and death. Where and how should the incisions be made? The practice adopted by some of plunging a knife through the perineum into the prostate, seems unscientific and inhuman, and may not achieve the object in view. What are the chief objections to it? A large branch of the pudic artery may be divided; the bladder, rectum, or urethra may be opened, and an intractable fistula created; extravasation of urine, and diffuse cellulitis may ensue. Again, it appears very objectionable to attempt to open a prostatic abscess, the position of which is unknown, by thrusting an inflexible instrument through the urethra in search of it. False canals may thus be made, the natural one, no matter how tortuous, may become still more so; the catheter may not be able to enter the bladder, from the swelling induced, and complete retention may result from this "heroic treatment."

If the matter be in either the right, or left lobe, or the prostatic capsule, which a *tactus eruditus* will soon determine, there can be little danger or difficulty in tapping it through the rectum, and with little or no pain, as in the case under consideration. This method is approved of by Nélaton, and other French surgeons of distinction. A bivalve speculum, of such calibre at the anal extremity as to admit the index finger for exploration, and a long bistoury, with the edge sharp only towards the point, will be most suitable for the operation. Time should be taken for the introduction and divarication of the speculum, on account of the unusual tonic condition of the sphincter ani in this disease. This strong tonicity appears to me to be the only fair objection to this mode of letting out the matter. On the withdrawal of the instrument, the muscle powerfully contracts, closes up the outlet made for the pus, and prevents any more from escaping. To meet this drawback, in the case before us I recommended active enemata of oil, turpentine, &c., which accomplished my desires. If the abscess confine itself to the middle lobe, or point towards the urethra, I can conceive no more appropriate means of treating it than by incision made through M. Desormeaux's endoscope, improved by Dr. Cruise.

In the after-management of the case, it may be useful to apply nitrate of silver, or some such stimulating astringent, to the abscess, which may readily be done through the instruments of which I have just spoken. It may be necessary to draw off the water after the evacuation of the pus. Should it be so, we shall have a safe guide into the bladder, by carefully pressing the instrument along the upper surface of the urethra—a rule for the introduction of the catheter inculcated by Mr. Butcher.

ON DREAMING, CONSIDERED ESPECIALLY IN RELATION TO INSANITY.

By THOMAS MORE MADDEN, M.R.I.A.,

LICENTIATE OF THE KING AND QUEEN'S COLLEGE OF PHYSICIANS IN IRELAND, MEMBER OF THE ROYAL COLLEGE OF SURGEONS OF ENGLAND, AUTHOR OF AN ESSAY "ON INSANITY AND THE CRIMINAL RESPONSIBILITY OF THE INSANE," "ON CHANGE OF CLIMATE, A GUIDE FOR TRAVELLERS IN PURSUIT OF HEALTH," &c., &c., &c.

(Continued from page 361.)

IX. THE REAL AND THE APPARENT DURATION OF DREAMS.

THE rapidity with which events that appear to have occupied long periods of time pass before the mind in dreams is another very interesting question. "In dreams," says Dr. R. R. Madden, "the time occupied by the playing out of entire scenes of an ideal drama, the wonderful incidents of which could not be described (were they to be written down) in half an hour, is often hardly appreciable; sometimes it is estimated by seconds, at other times by minutes."(1) This fact is so generally admitted that I have referred to it only in consequence of some remarks in the Rev. Dr. Wills' learned paper "On Dreams," in which he says—"It seems probable that most dreams occupy the same time which the same succession of ideas would in waking; there seems at least no ground for the contrary opinion."(2)

It would be easy, however, to quote numerous instances in refutation of this theory of Dr. Wills'. Very interesting illustrations of the inaccurate perception of the time occupied by dreams are given in Lord Brougham's "Discourse on Natural Theology," and also in Dr. Winslow's work, "On Obscure Diseases of the Brain." Dr. Abercrombie narrates the following instance of this:—"A gentleman dreamt that he had enlisted as a soldier, joined his regiment, deserted, was apprehended, carried back, tried, condemned to be shot, and at last led out for execution. After all the usual preparations a gun was fired; he awoke with the report, and found that a noise in an adjoining room had both produced the dream and awakened him."(3) The late Sir B. Brodie's remarks on this topic are very suggestive. He says—"If we were to pursue this subject it would lead us to some curious speculations as to our estimate of time, and the difference between the real and the apparent duration of life. . . . The apparent duration of time is longer or shorter in proportion as a greater or smaller number of different states of mind follow each other in succession."(4)

From the foregoing observations we may, I think, arrive at the conclusion that neither of the two theories—one or other of which are most generally adopted with regard to

(1) Dr. R. R. Madden, "Phantasmata, or Illusions and Fanaticisms of Protean Forms Productive of Great Evils," vol. i., p. 92. London. 1857.
(2) Rev. Dr. Wills, "On Dreams," Transactions Royal Irish Academy. 1859. Part 2nd.
(3) Dr. Abercrombie, "Inquiries Concerning the Intellectual Powers," p. 234. London. 1853.
(4) Sir Benjamin Brodie, "Psychological Inquiries," part 1st, p. 149. London. 1862.

dreams—*i.e.*, that which teaches that dreams depend on the association of ideas, on the one hand, and that which supposes their origin in bodily sensations on the other—afford any satisfactory explanation of the phenomena of dreaming, though, as has been already shown, both these causes, either alone or combined together, frequently do influence the state of the mind in sleep. But to assert that a dream is occasioned by some physical sensation, or by the association of ideas, affords, I think, little insight into the real nature of a mental condition in which the images set before us, and the impressions produced upon the mind are as vivid, and apparently as actual, as those transmitted through the waking senses, and far more distinct than those which can be called up by any voluntary exercise of the memory. Nor do these theories in any wise explain or even throw the least light upon the singular exaltation of the mental powers, or at any rate of certain faculties of the mind, such as the imagination or the memory, which occasionally occur in the dreaming state.

Too many well-authenticated facts are recorded concerning this mysterious condition of the mind to permit us to doubt that manifestations of a nature which cannot be explained by any reference to physical laws have taken place during sleep. To all these cases I would apply the words of Bossuet, when speaking on the same subject—"Il y a," he says, "des choses tres admirables qui échappent a notre vue et qui n' sont ni moins vrais, ni moins desirables, quoiqu'on ne les puisse ni comprener ni imaginer."(1) I have collected a very large amount of facts bearing on this branch of the present inquiry. This, however, would not be a proper place for entering into the consideration of so extensive, though so important and interesting, a topic. But I would gladly recur to it should I be again afforded an opportunity of doing so. The subject, however, which we have now to consider is one of a very different character from the foregoing—namely, the physiology of dreaming.

X. THE PROXIMATE CAUSE OF DREAMING.

It is probable that dreaming is intimately connected with the peculiar state of the cerebral circulation during sleep. In proportion to its size no part of the body receives so large a supply of blood as the brain, and none of the other organs of the human frame are provided with such exquisite adaption of structure for the maintenance of a healthy and constant equilibrium between the contents of the veins and arteries as it is. I should apologize to this learned Society for alluding to what must be familiar to every member present, were it not that this reference to the physiology of the cranial circulation is indispensable to the consideration of the physiology of dreaming.

We should therefore bear in mind that, in consequence, probably, of its high vitality and complex organization, the brain requires and receives a constant and very large supply of blood, amounting, as physiologists assert, to no less than one-fifth of the entire quantity of blood in circulation in the body. And certainly in no part of the frame do we find such ample provision for the supply of a due amount of arterial blood, and, more especially, such a provision made for the constant equilibrium between the relative proportions of venous and arterial blood, as within the cranial cavity, provided as it is with four great arterial trunks, numerous veins, sixteen large sinuses and a most remarkable system of anastomosis, not confined as in other parts to the capillary branches, but occurring, as in the circle of Willis, directly between the large arteries. Moreover, the cerebral vessels are peculiarly fitted for the maintenance of the balance of the circulation between their veins and arteries by the middle or contractile muscular coat of the cerebral veins being developed in a way which does not exist in other parts of the venous system.

The majority of recent physiologists appear to agree with Mr. Durham, in the conclusions he arrived at from his elaborate experiments on this subject, namely, that—"During sleep the brain is in a comparatively bloodless condition; and the blood in the encephalic vessels is not only diminished in quantity, but moves with diminished rapidity".(1) The following case, observed at Montpellier, very strongly confirms this opinion:—A woman having lost part of the skull, from disease, the corresponding portion of the brain and its membranes remained exposed. "When she was in a deep or sound sleep, the brain lay in the skull almost motionless; when she was dreaming, it became elevated; and when her dreams (which she related on waking) were vivid or interesting, the brain was protruded through the cranial aperture."(2) It must be borne in mind that in this case, and in those in which a portion of the cranium has been removed purposely, as was done in Mr. Durham's most interesting experiments, the brain and its membranes were in an abnormal state, and therefore such observations must be regarded as more or less unsatisfactory and liable to error. Indeed, so far are we yet from an accurate knowledge of the true vascular condition of the brain during sleep, that in a work published within the last few years by a very distinguished member of the Institute of France, we find it asserted that "during sleep the brain is in a state of passive congestion."(3)

Opposite as these opinions may appear, it will, I think, be found that dreaming is best explained by adopting both these conjectures in part. If we combine these theories thus, we may suppose that dreams are caused by a partial relaxation of the tonic contractility of the cerebral veins, which limits the amount of blood that passes through these vessels, and that thus the different parts of the encephalon may be in very different conditions at the same time. For instance, the blood may be moving with much greater force and rapidity through the capillaries of the base of the brain, than in those of the superior portions of the hemispheres. Or, in other words, that something like active congestion, confined to a small portion of the brain, occurs. And if, as it has been conjectured, the localities or parts of the cerebrum are subservient to the several functions of the mind, (a point on which I offer no opinion, however), by this theory we might more easily comprehend the phenomena of a state marked by the activity of certain of the mental powers, whilst the rest are for the time suspended. But, without any reference to phrenological views, I think that the state of the cerebral circulation during sleep seems to be immediately connected with dreaming, and probably there is then some alteration in the vascular condition of the superficial gray structure of the brain during sleep modifying the character of the nervous force evolved by it. What the nature of this supposed change in the action of the brain during sleep consists in, is a matter which we must necessarily remain utterly ignorant of. For, in truth, nothing is known of the nature of the cerebral action by which nervous force is evolved at any time or under any circumstances; and modern physiologists have done little more than re-echo the often repeated and as often contradicted assertion, that all the operations of the mind are accompanied by a molecular change in the cortical or vesicular substance of the brain.

If this theory be correct, it does not lessen the interest attaching to this most remarkable condition of the mind. The physical change in the vesicular structure of the brain, which I have described as probably connected with dreaming, if it does really occur at all, as I have supposed (for where proof is impossible a reasonable conjecture is all that can be offered in its place) is merely an accompaniment, and cannot be regarded as the cause of dreaming. For this vesicular change could only take place in consequence of some primary existing cause, which we may suppose to be the action of the mental principle.

XI. THE PATHOLOGICAL INDICATIONS FURNISHED BY DREAMS.

Having now discussed the physiology of dreaming, we may next proceed to consider its pathological and medical aspects. In the earliest annals of every country we find that the interpretation of dreams was a part of the office of the physician. In the treatise "On Dreams," commonly

(1) "Chefs d'Œuvre de Bossuet," p. 449. Paris edition. 1829.

(1) Mr. Durham "*On the Physiology of Sleep—Guy's Hospital Reports.* London, 1860. P. 24.
(2) Caldwell in "*Psychological Journal*," vol. v. p. 74.
(3) Mons. L. F. Maury, "*Le Someille Et Les Reves.* Paris, 1862.

ascribed to Hippocrates; in the last volume of "Saxon Leechdoms," published in 1866 by direction of the Master of the Rolls; and in an ancient Irish Medical MS., a translation of which, by Mr. O. Longan, may be found in the MS. collection of the Royal Irish Academy, we find sufficient proof, without referring to other authorities, of the same importance being attached to those signs of disease which were supposed to be furnished by dreams, in countries and ages very remote from each other.

Opinions that are very wide-spread and generally adopted are seldom devoid of some foundation in truth; and although the subject I am treating of has now passed completely out of the hands of medical writers, who regard it as something puerile and unworthy of scientific investigation, I shall endeavour to show that this view of the matter is not altogether just, and that something may occasionally be learned by attending to the peculiar character of our patient's dreams in certain cases.

The phenomena accompanying any deviation from the normal quantity of blood in the encephalon, and the functional disturbance of the brain resulting therefrom, as evinced under all circumstances that occasion either an augmented or diminished supply of arterial blood, naturally lead us to anticipate that similar circumstances will act still more potently in sleep, when the intellectual operations are more directly under the influence of physical and internal causes.

The early physicians were evidently aware of this; thus, the "Father of Physic," or at least some cotemporaneous Greek physician, laid down the theory that—"Such dreams as represent at night a man's actions during the day, and exhibit them in the manner in which they occurred, namely, as performed well and justly deliberated, these are good to a man, and prognosticate health, inasmuch as the soul perseveres in its diurnal cogitations, and is not weighed down by any repletion, evacuation, or any other external accident. But when the dreams are very opposite to the actions of the day, and when there is a conflict between them—when this happens, I say, it indicates a disorder in the body; when the contrast is great, the evil is great, and when the one is small, the other is small also."(1) An English philosopher of the seventeenth century, Thomas Hobbs, propounds the following theory on this subject:—"And seeing dreams are occasioned by the distemper of some of the inward parts of the body, divers distempers must needs cause different dreams."(2)

A renowned physician and philosopher of the same century, Guy Patin, says:—

"Il est constant que l'on peut connaître par les songes quelque dispositions corporelle. Je suis la'dessus du sentiment de Sainte Thomas, quand il dit.—"Medici dicunt esse intendendum somnis ad interiores dispositiones." En effect, les malades songent d'ordinaire autrement que ceux que se portant bien; les melancholiques autrement que les sanguins, les bilieux autrement que les pituiteux, mais je m'en tiens la, sans tirer d'auters conjectures sur les choses libres et de pur hazard, jusqua ce que je croye qu'il yait du surnaturel dans ce qu'on a songe; alors je rappelle dans ma memoire l' histoire de Joseph, de Daniel, &c., pour m'y soumettre comme a' des moyens dont l' Eternel se sert, pour faire connaitre aux hommes ses volontez."(3) I regret exceedingly that my space obliges me to omit Sir Thomas Brown's observations on this topic in his most eloquent work, the "*Letter to a Friend on the death of an intimate Friend.*"

Albers, as cited by Baron von Feuchtersleben, enumerates the following as among the most approved signs to be obtained from the medical interpretation of dreams. He says:—"Lively dreams are, in general, a sign of the excitement of nervous action. Soft dreams a sign of slight irritation of the brain; often, in nervous fevers, announcing the approach of a favourable crisis. Frightful dreams are a sign of determination of blood to the head. Dreams about fire are, in women, signs of an impending hæmorrhage. Dreams about blood and red objects are signs of inflammatory conditions. Dreams about rain and water are often signs of diseased mucous membranes and dropsy. Dreams of distorted forms are frequently a sign of abdominal obstructions and disorders of the liver. Dreams in which the patient sees any part of the body especially suffering, indicate disease in that part. Dreams about death often proceed apoplexy, which is connected with determination of blood to the head. The nightmare (incubus, ephialtes), with great sensitiveness, is a sign of determination of blood to the chest." "To these," says Baron Feuchtersleben, "we may add that dreams of dogs, after the bite of a mad dog, often precede the appearance of hydrophobia, but may be only the consequences of excited imagination."(1)

Dr. Forbes Winslow quotes several cases in which dreams are said to have been prognostic:—"Arnauld de Villeneuve dreamt one night that a black cat bit him on the side. The next day an anthrax appeared on the part bitten. A patient of Galen's dreamt than one of his limbs was changed into stone. Some days after this leg was paralysed. Roger D'Oxteyn, Knight of the Company of Douglas, went to sleep in good health; towards the middle of the night he saw in his dream a man infected with the plague, quite naked, who attacked him with fury, threw him on the ground after a desperate struggle, and, holding him between his open thighs, vomited the plague into his mouth. Three days after he was seized with the plague, and died. Hippocrates remarks that dreams in which one sees black spectres are a bad omen."(2)

So far we have traced the literature of this subject, from the earliest time down to the latest work of authority on psychological medicine, and it only remains now to add a few practical observations on the signs of disease—especially of mental disease—furnished by dreams occasionally.

Fearful dreams, if frequently repeated, may eventually influence the permanent state of the mind, and considering the close resemblance between the phenomena of dreaming and insanity, which Sir H. Holland defines as—"a waking and active dream,(3) we may expect that the former condition, if prolonged, might pass into the latter state. Insanity occasionally does commence in a dream that continues after the cessation of sleep, and cases are recorded in which persons recovering from mental alienation were nightly disturbed in their dreams by the same hallucinations which had previously haunted them in the waking state(4)

Esquirol regarded dreams as capable of furnishing valuable indications in some obscure cases of insanity in which the subject of the mental disorder was carefully concealed during the day, but was revealed in sleep by watching the patient's dreams. M. Brierre de Boismont also records several cases in which the patient's dreams lead to a discovery of the nature of the mental disease from which they suffered."(5)

The derangement of the cerebro-spinal functions accompanying fever is, in all cases, greatest towards night, at which time, even in mild cases, some degree of delirium or wandering is commonly observed. Now, if this take place while the patient is still awake, and subject to the influence of external impressions, how much more readily will such derangement be produced when the mind is no longer under the correction of the senses. The disturbed dreams of fever-patients are probably caused by the general vascular excitement, by some local irregularity of the cerebral circulation, and, perhaps, more directly, by the action of the fever-poison in the blood on the vesicular structure of the brain. And to the imperfect elimination of this poison from the blood, we may also attribute the painful and disagreeable dreams which often continue for some time to disturb the repose of persons convalescing after severe attacks of fever.

(To be continued.)

(1) Dr. Adam's translation of Hippocrates, Sydenham Society Edition. London, 1849, Vol. i. p. 83.
(2) Thomas Hobbs (of Malmsbury), *Leviathan*, part 1st, chap. ii. p. 7.
(3) *L'esprit de Guy Patin*, p. 132. Amsterdam, 1710.

(1) "The Principles of Medical Psychology." Translated by Dr. Babington and Mr. Lloyd, p. 198
(2) Quoted by Dr. Forbes Winslow in "Obscure Diseases of the Brain, &c., p. 589.
(3) Sir. Henry Holland. Chapters on Mental Physiology, p. 110.
(4) See Dr. Brierre De Boismon.—*Des Hallucinations*, p. 233. Paris, 1845.
(5) "Des Hallucinations." Paris, 1845. P. 232, 233.

SPECIFICS.

By E. H. MARSH, M.D., T.C.D.

Let us allow a certain place to specifics, but let us recollect that they really are conditional advantages, and most imperative is the necessity that all requirements should be met before the remedy takes up its position and maintains it, and most true it is that all that is true and enduring in principle falls back upon the original law.

To restore unhealthy conditions to the state of health means, therefore, not to apply a specific to the disorder which is apparent, unless in every other point the health of the whole of the numerous functions is complete. Then, if necessary, the specific does its part; supposing, always, that the balance of all the other functions is thoroughly adjusted. Of specifics, we may say, for conscience sake, there are two kinds: one, such as act decidedly, and at once, on any simple disorder; and another class which become such from the place they have in bringing about healthy action in the progress of cure. We are all familiar with the names of such specifics as bark, quinin, colchiceum. copaiba, powder of iodine and bromine, in combination with potass. soda, guaicum, antimonii, potassio, tart., strychnia, aloes, &c., &c., and they certainly act specifically where there is nothing to embarrass and prevent their efficacy.

The tincture of iron in the advanced stage of acute dropsy, from anæmia, in catarrhal discharge of the mucous surfaces of the bladder and uretus, and such restoratives as reproduce red colouring matter in the blood, act specifically, but in this more limited sense, more certainly as strengthening the circulation and restoring the functions, more like the combination which is effected by means of nutriment as far as iron only is taken into the account, thus we regard here also the astringent effect of the muriatic acid with the iron. In most instances which are brought under our notice there is general disorder of the whole system, that it must be our first object to set up a general improvement of healthy actions before the specific can take effect. There really is a great deal to be done before the system is in a state to receive specific medicines, even when they are applicable, and it is not possible after they are used to continue them very long, before the attention is again drawn from them to the condition of other states which need to be considered; and also in all chronic disorders, it is quite essential to fight against the prevailing disease or tendencies by all other requisites. If once the diathesis is formed you can but hope to palliate, and it is to prevent this that so much effort and resolution, morally and physically, are to be enjoined.

In short, so truly are most said to fight out the battle of living, and the *savoir vivre* as well as the battle of life.

Hospital Report.

LONDON HOSPITAL.

A CASE OF MALIGNANT DISEASE OF THE BRONCHIAL GLANDS, KIDNEYS, SUPRA-RENAL CAPSULES, PANCREAS, AND MESENTERY.

Under the care of Dr. HERBERT DAVIES.

(Reported by Mr. McCarthy, Assistant Resident Medical Officer.)

J. G., æt. 43, an ostler, was admitted into Fitzgerald Ward, January 1st, 1867.

He was very pale and emaciated, had a rather vacant expression of countenance, spoke in a listless hesitating manner, and complained of nothing but weakness. He stated that he had never had any acute illness; that all of his family were healthy, and that his present feeling of weakness and depression had been gradually increasing for some months. No satisfactory history could be obtained from him, but it was ascertained that, before applying for admission here, he had attended as an out-patient at the Victoria Park Hospital, under the care of Dr. Sutton, who has kindly permitted me to extract from his notes the following particulars of the man's then condition:—

"He complains of being weak and low; feels as if there were a lump in his throat; has no cough.

"There is dulness over the lower third of the left lung posteriorly; no dulness anteriorly.

"Respiration much more feeble over left than over right lung; expiration everywhere prolonged.

"Tactile vocal fremitus diminished on left side."

This was about the beginning of December, 1866.

At the time of his admission here it was found that there was absolute dulness on percussion all over the left lung, both back and front; very feeble respiration; absence of tactile vocal fremitus, and greatly diminished vocal resonance throughout the same region; respiration over the right lung was puerile.

He coughed a little occasionally, but did not expectorate anything.

The position of the heart was normal. After he had been in hospital some weeks, a loud, systolic bruit was detected at the left apex of the heart, which had certainly not existed when he was first examined.

The urine was abundant, acid, sp. gr. 1018, without albumen. No microscopic examination was made, as it appeared normal in every respect.

The diagnosis in this case was extremely difficult. It was doubtful whether to regard it as a case of pleuritic effusion, or of extremely thickened pleura, the result of old disease. There were objections to both of these. There was no history of any acute illness. The non-displacement of the heart, and the fact that he could lie on his right side without any inconvenience, contra-indicated pleuritic effusion, and the extremely feeble respiration, the absence of tactile vocal fremitus, the impaired vocal resonance, and absolute dulness on percussion over the entire left lung, were opposed to the supposition of a thickened pleura.

The general opinion was, on the whole, in favour of pleuritic effusion, but so doubtful did it appear, that Dr. Davies was reluctant (fortunately, as the result proved) to assent to the insertion of a trochar, which had been suggested as a ready method of solving the difficulty.

The treatment adopted was: Good diet, tonics, and counter-irritation over the left side by flying-blisters.

There was no improvement in the patient, who seemed to be becoming more and more feeble every day. About four weeks after his admission he had a fit during the night, in which he foamed at the mouth, struggled a good deal, and then sank into a kind of stupor. The next morning, on recovering, he declared that he never had had any similar attack before, and his wife confirmed his statement.

His urine was examined three or four times after this, but nothing abnormal was discovered.

He continued in much the same condition for some weeks, and at last died, apparently from exhaustion, March 22nd, 1867.

The post-mortem was made by Dr. Sutton, pathologist to the hospital, from whose report the following account is taken:—

The body was much wasted; rigor mortis well-marked; no œdema.

On opening the thorax the pleura were found to be adherent throughout. At the root of the left lung was seen a large growth, firmly connecting the heart and lung, so that they had to be removed together. The weight of both together was four and a-half pounds. This growth was hard and firm, and was much larger posteriorly than anteriorly. It seemed to have commenced in the bronchial glands at the base of the left lung, and had completely surrounded the left bronchus, which was so compressed by it as to have altogether lost its tubular form, and presented the appearance of a narrow fissure. The left lung was collapsed, airless, and sank in water. On section a number of yellowish white spots were visible amidst the collapsed lung tissue. These proved to be the mouths of bronchial tubes.

On cutting through the growth, so as to separate the

left lung from the heart, a large mass of soft malignant tumour became visible, exceedingly juicy, so much so that on slight pressure a quantity of thick milky looking fluid exuded from the divided surfaces of the mass. This growth had invaded the pericardium, causing acute inflammation, by which the surfaces of the pericardial sac had been glued together. The right lung weighed twenty-two ounces. It was much congested, soft, and easily torn. In one of the bronchial glands, at the root of this lung, was a deposit similar to that in the left bronchial glands.

The heart was healthy, as were also the liver and spleen.

Both supra-renal capsules had been replaced by malignant growths, the right so completely, that it could not have been recognised but for its position.

The kidneys together weighed 2 lbs. and three and a-quarter ozs. The left was almost completely converted into a large malignant mass of a greyish white appearance. There were also several ecchymoses, as if a quantity of blood had been extravasated.

The right kidney was smaller, and about one-half of its structure was healthy, the other half being occupied by malignant growth.

The pancreas was also involved in this cancerous disease.

In the lesser omentum was a large mass about the size of an orange—heavy and similar in *appearance to the other growths.*

In this case there was nothing during life to have suggested what was shown by the post-mortem examination to have been the actual disease. The appearance of the man was not inconsistent with cancer, but yet the cachexia was not so marked as to suggest it.

The complete absence of pain or distress throughout the entire progress of the disease, even after the invasion of the pericardium, which probably occurred subsequently to his admission into the Hospital, was very remarkable. It is to be regretted that the urine was not examined microscopically. Another case, however, has recently been met with in the Hospital, where both kidneys were even more extensively involved in cancerous disease; but, notwithstanding repeated microscopic investigations, nothing was discovered to indicate the renal condition, which was not even suspected during life.

NEW INVENTIONS, &c.

DR. RICHARDSON'S STYPTIC COLLOID.

This preparation was brought before the Profession at the first of Dr. Richardson's lectures, to which we have previously directed attention. It consists of ether and alcohol, saturated with tannin and gun-cotton. When diluted with an equal quantity of ether, it may be used in the form of spray. Undiluted, it is applied with a brush. The fluid coagulates the blood, serum, albumen, liquor sanguinis, and pus. When brought into contact with a wound, the ether and alcohol are volatilised by the heat of the body, and the tannin and gun-cotton are left intimately combined on the surface. The tannin converts the albumen into tough leathery membrane. The cotton gives a certain consistency. Numerous experiments, some of which were repeated at the lecture in question, show that solidification of the fluids is not the only effect, but that deodorisation is produced by this application. As the animal tissues form a combination with the dressing, the exclusion of the air is perfect, and the healing process uninterrupted. After operations, or in recent wounds from accident, the treatment by this process is most simple, and reduces the case to a state similar to that of subcutaneous lesion.

The edges are to be brought carefully together (with a suture when necessary) in the usual way. Then the *styptic colloid* is to be applied freely with a brush. A thin layer of cotton wool soaked in the colloid may then be laid along the line of the wound, and, if thought advisable, a further layer of the liquid laid on with the brush. In a suppurating wound it is only necessary to brush over the surface, so as to leave a layer of colloid upon it.

Compound fractures may, in Dr. Richardson's opinion, be most advantageously treated with this new remedy. The styptic colloid may be poured into the wounded cavities, and thus the case reduced to one approaching simple fracture.

A great advantage of this dressing is that it need not be removed unless there were fœtor from the wound prior to its application, or unless it should be raised by fresh discharge, or symptoms of suppuration should occur.

Finally, this styptic forms a base for other remedies, among which may be named creasote, carbolic acid, quina, iodine, iodide of cadmium, bichloride of mercury, morphia, cantharidine, &c. Messrs. Robbins and Co., 372, Oxford-street, W., are the manufacturers.

Reviews.

CHEMISTRY: "with Experiments, and a Comparison of Equivalent and Molecular Formulæ." By Chas. Loudon Bloxam. John Churchill and Sons. London, 1867.

It might almost be said that Chemistry had been over-done, so numerous have been the works written upon this science—the years 1866 and 1867 having been particularly prolific in this respect. The result of this redundancy of literature is, as might be naturally supposed, a sameness in many of the works to those that have gone before them. This is illustrated in the latter or organic part of the chemistry before us—not for a moment that we wish to attribute plagiarism to the author, but we think this part savours too much of compilation. We have commenced by saying the worst we have to say of this otherwise excellent work. Thoroughly practical at all points, there is a wonderful amount of information in this medium-sized treatise on Chemistry. The work is evidently written from a lecturer's point of view, and is freely interspersed with experiments, which are extremely well arranged to illustrate the gradual unfolding of the science. A great number of these experiments are connected with explosive compounds, the author having a view to the requirements of military students. The arrangements of the apparatus for many of the said experiments are ingenious, and well shown in the numerous illustrations with which the book is interspersed. It is quite a treat to find the standard "cuts" of distillatory apparatus, the orthodox retorts, somewhat differently arranged. Public lecturer's may pick up a hint from this part of the work.

Although the author explains the new changes in theoretical chemistry, he does not adopt or use them any further than is necessary for such explanations. We think he is wrong on this point, but in the present state of science we are, at the same time, compelled to admit that he is entitled to adhere to the old system, whether, as a matter of policy, it is desirable, a few more years will prove. Prof. Bloxam's book is the only one of importance published within the last few years that has retained the old equivalents.

We cannot do better than give the following extract as illustrative of the arrangement of this work:—*Nitric oxide or binoxide of nitrogen* is usually obtained by the action of copper upon diluted nitric acid.

"$4\,(HO\,NO_5) + Cu_3 = 3\,(Cu\,O.\,NO_5) + NO_2 + 4\,HO.$

"300 grains of copper turnings or clippings are introduced into a retort, and three measured ounces of a mixture of concentrated nitric acid with an equal volume of water are poured upon them. A very gentle heat may be applied to assist the action, and the gas is collected over water, which absorbs the red fumes (NO_4) formed by the union of (NO_2) with the air contained in the retort."

Nitric oxid is distinguished from all other gases by the production of a red gas, when the colourless nitric oxide is allowed to come in contact with uncombined oxygen, the presence of which, in mixtures of gases, may be readily detected by adding a little nitric oxide. The red gas consists chiefly of nitric protoxide (NO_4), but it often contains also some (NO_3) nitrous acid.

"The combination of nitric oxide with oxygen, may be exhibited by decanting a pint bottle of oxygen, under water, in a tall jar filled with water coloured with blue litmus, and adding to it a pint bottle of nitric oxide. Strong red fumes are immediately produced, and on gently agitating the cylinder the fumes are absorbed by the water, at the same time reddening the litmus. The water will now have been absorbed to half its

volume, and if another pint of nitric oxide be added, the remainder of the oxygen will be absorbed, showing that two volumes of nitric oxide combine with one volume of oxygen forming the nitric peroxide, which is absorbed by the water."

A voluminous and complete index finishes one of the most practical manuals of chemistry that has been written for some time. In this index the symbols are given, an excellent plan, which, if we mistake not, first emanated from Dr. Williamson with his "Manual for Students." C.R.C.T.

INTRODUCTION TO CHEMICAL PHILOSOPHY. ACCORDING TO MODERN THEORIES. By Dr. A. C. Wurtz, F.R.S. Translated by Wm. Crookes, F.R.S. London: Dutton, Wine Office Court.

Those of our readers who retain a vivid interest in the progress of modern chemistry, and what medical man does not? will be glad to hear of a very neat and portable English translation of the valuable introduction of Dr. Adolphe Wurtz. The work has long been known on the Continent as one distinguished for the clearness of its statements, the excellent arrangements of its facts, the justice it does to all labourers in the field, and the condensed account it gives of the subject. The book traces accurately and fairly the changes that have successively taken place in the opinions of chemical investigators and reasoners, respecting the laws of combination, the theories of equivalents, atoms, &c., and thus furnishes a valuable historical sketch of the rise and progress of Chemical Philosophy. By this method the student is led, as it were, through the same paths that earnest workers have already trodden, and at last landed in the open space that lies before him for exploration.

To descend to a few particulars. The first part of this volume is devoted to equivalents, atomic weights and molecular weights; the second to the theory of types and atomicity; the third to the connection between organic and inorganic chemistry; the conclusion gives the dualistic hypothesis, the unitary system, and the new chemistry. It may be thought that for the development of all this a very ponderous volume would be required, but happily Dr. Wurtz has the rare gift of expressing himself in few words, and while nothing seems to be omitted, and there is no stint of tabular matter, the present translation only occupies a thin volume of 192 pages in small 8*vo*. Every earnest student may, therefore, rejoice that in a little book of moderate price he can possess such a treasure.

As the work of Dr. Wurtz is so well known, and as it has already been published in the columns of the *Chemical News*, we ought, perhaps, to confine our further observations to the labours of the translator. These have been by no means light, but they have been carried out in a manner that leaves nothing to be desired.

The perfection of translation is to present the ideas of the author in another language so naturally, that the reader would not suppose them to be really transferred from another tongue by an interpreter.

In scientific works this is particularly difficult, and even skilled linguists often fail to bestow the attention necessary to success.

We are bound to pronounce this translation by Mr. Crookes excellent.

The most recondite parts of the work are expressed in such English, that any one might readily imagine them to be the utterances of a fluent London lecturer. Page after page may be read without noticing a foreign idiom. Whatever dryness or dullness appears in the book belongs to the difficulty of the subject itself—not to the author's style, nor to the translator's version. We think, therefore, Mr. Crookes may be fairly complimented on the manner in which he has accomplished his task. The *Chemical News* did good service by publishing Dr. Wurtz's treatise, and its re-publication in the present compact form cannot fail to give satisfaction to all lovers of Chemical Philosophy.

CURRENT LITERATURE.

The *Westminster Review* contains its usual number of thoughtful articles, amongst which we may specially mention the one on Thomas Hobbes, the philosopher of Malmesbury, whose character and works have, in the present century, excited so much discussion. The portion of this Quarterly most interesting to our Profession is the contemporary scientific literature, in which will be found brief notices of many new medical books.

The *New York Medical Journal*, for March, which has only just reached us, is distinguished by a most important article, filling twenty-seven pages, on "Osteo-Myelitis," written by Dr. Lidell, Inspector-General of the Army of the Potomac. It consists of an exhaustive memoir, which was read before the New York Academy of Medicine last December, and to which every one in search of reliable information on the subject will naturally turn. In the report on the "Progress of Medicine," some of the cases of Dr. Lyons are quoted from our columns.

The *American Journal of the Medical Sciences* opens with an elaborate article on wounds of the internal jugular vein, which treats of them with special reference to the safety of the ligature, and comprises a statistical account of eighty-six cases. This article is from the pen of Dr. Gross. Then follows rupture of the abdominal and pelvic viscera, by Dr. Lidell, which is especially devoted to injuries to the bladder, including those occasioned by fire-arms. Dr. McClellan, of the United States Army, contributes an article on the internal use of chloroform in intermittent fever. Dr. Livingston writes on ether in laryngitis with exudation of lymph. Dr. Noyes, of New York, treats of the ophthalmoscope as an aid to diagnosis in diseases of the brain. Dr. Smith of the United States Army gives an account of malignant pustule as it appeared in Mexico in 1865. Next we observe a very interesting account of the appearance of the membrana tympani and fauces in 296 cases of deaf-mutism, as found on examination by Drs. Roosa and Beard. Of these cases 61 per cent were acquired, and 39 per cent. congenital. The membrane was opaque, or sunken, or showed signs of former inflammatory action in the cavity, in 118 of the congenital cases. It was congested in 16; normal in 22; absent in 14; indistinctly seen on account of wax in 8; and in 4 there was calcarious concretion. In 80 of the cases of acquired deaf-mutism, the writers found the membrane present. In 29 it was perforated; in 3 it was not distinctly seen; there was calcarious concretion in 2. Of all the cases more than two-thirds exhibited some chronic faucial disease. After this paper there is a case of cure of aneurism of the common carotid artery by compression, related by Dr. Kerr; a case of removal of polypus from the inferior anterior surface of the eighth vocal cord by Dr. Cohen, and a description of an invalid bed, by Dr. Cutter of Boston. Such are the original communications in this number of the American Quarterly. The Reports of societies, reviews, and bibliographical notices, as well as the summary of progress in the various departments, are all as copious as usual. We look with much interest to the appearance of this journal which continues under the able editorship of Dr. Hays, and worthily represents American medicine.

The Great Northern Hospital.—Amongst the enormous wealth of the metropolis, and the many munificent legacies bequeathed to various charitable institutions, one of our noble hospitals, at least, seems not to be in fortune's path. Last Thursday, at the celebration of the annual festival, it was admitted that, notwithstanding the great amount of good it had done, and was doing, in the centre of a very poor locality, unless funds were forthcoming, they must of necessity close the doors of a large portion of the building. We trust, however, that the eloquent appeal by the chairman, on behalf of so valuable an institution, will result in materially aiding the committee and staff in the execution of so good a charity.

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The Medical Press and Circular.

"SALUS POPULI SUPREMA LEX."

WEDNESDAY, MAY 8, 1867.

PHARMACEUTISTS IN ENGLAND.

The practice of Pharmacy can never be an indifferent subject to the great body of the Medical Profession, and the laws regulating it, and proposed changes in them, consequently possess for our readers a lively interest. Even were Pharmacy absolutely divorced from medical practice, it would be necessary for prescribers to make themselves acquainted with its details, and friendly co-operation for the public weal would be required. We cannot, therefore, consider ourselves disinterested spectators of the animated debate now going on as to the proposed new Pharmacy Act, which would throw all power into the hands of the Pharmaceutical Society, and compel all outsiders to join that useful body. If the dispensing of prescriptions is to be protected at all, and while other branches of medical practice are protected, it is only logical to do so; we know no better way than committing the whole control of Pharmaceutists to a society that has considerably raised the status of the craft. To multiply privileged corporations is simply ridiculous, and medicine and surgery have long suffered from the number they have to support. The proposal is therefore reasonable, that in future no one should practice Pharmacy who had not been examined and approved by the Society. The point which has raised the storm is the manner in which the chemists and druggists now in business, but not members of the Society, are to be persuaded to join it. The Council has offered large concessions—too large in the opinion of many, who resent the intrusion of unexamined men into their ranks, and fear the value of their diploma will thereby be diminished. It is impossible to deny the justice of this argument, or to conceal the fact that a disguised sale of a qualification is unworthy of any respectable corporation, although it has been practised by those who sway the destinies of higher branches of the healing art. The act, however, has, in every instance, subjected the *bona fide* holders of those diplomas to the greatest annoyances.

But the chemists and druggists will not come in on other terms. What then is to be done? It seems to us that there is a simple and satisfactory mode of action which would be just to all, and it is a plan that has been already successfully carried out.

The Apothecaries' Act provided that those in practice on its being passed, should continue to enjoy all their privileges, but that no one should afterwards commence practice without the license of the company. The result of this is, that even now a few men are inscribed on the "Medical Register" as "in practice prior to 1815." That is their qualification. Of course, every year the number of these practitioners decreases, and they will soon disappear from the list. What is to prevent a similar course with the Pharmaceutical Society? Let them get a stringent act to prevent any one practising Pharmacy in future—and reserve the rights of the existing chemists and druggists. But they might go one step further. The Apothecaries' Company had no power to take a census at once, and register the name of every one in actual practice, and consequently had in some cases a difficulty. Let every one be compelled to register himself during the year 1867, or forfeit his privileges. Thus there would be an end to all discussion as to who is and who is not legally entitled to dispense medicines, sell poisons, &c. A further step might be gained by admitting all registered chemists and druggists who pleased to the examinations, without proof of study or any other restriction. The multiplicity of grades in the Society—the distinction between associates, members, and pharmaceutical chemists, is, in our opinion, unadvisable, if not frivolous. One qualification for all who practice Pharmacy is what is needed, and *member* is the natural term. If there is to be another grade, it should be for those who, already in business and on the proposed register, would submit to a modified examination, and accept a similar term—associate is a good one—but would renounce all claim to a share in the government of the Society.

Such are our own ideas of the subject. We offer them with every wish to see Pharmacy rank higher than it has yet done as the handmaid of Medicine.

It must be remembered that the statements in this article in nowise apply to Ireland, where for many years the practice of Pharmacy has been restricted by law to licensed apothecaries. No chemist or druggist can compound a prescription in Ireland.

Notes on Current Topics.

The New Pharmacopœia.—The delay in the production of this important national work has now ended. The book is in the hands of the Profession, and, for good or evil, will, probably, for some years, be the only recognised authority in the three kingdoms. The reception that has been accorded to it thus far is really encouraging. We have no

wish to be captious, no desire to look for defects, and we think all interested in the matter will be glad to be relieved from the uncertainty in which medicine and pharmacy have so long been involved. An enormous cost has been incurred by the Profession, and it is sincerely to be hoped that the new edition will prove as useful as that of 1864 proved useless. It is a well got up volume, in post 8vo, and the price has been fixed at 6s. We cannot but feel that this is rather too much. Long ago we urged the propriety of selling it at the usual price of Parliamentary blue books. It is almost too bad that those who, in good faith, purchased the more expensive volume in 1864 should, in 1867, be subjected to a fine for their endeavour to comply with the laws. It is, however, too late for further remonstrance, and we hope the present work will soon be generally used. We have already devoted several articles to a consideration of its contents, and now that it is actually in circulation, shall be obliged to recur to it more at length. It will be our endeavour to treat its provisions with the candour and impartiality which have characterised all our criticisms, and with the fullness that a work of such authority unequivocally demands. In the columns devoted to our correspondents we shall, of course, be as ready to express the opinions of others on this as on other topics. At the same time we may state that, in any discussion that may be provoked, we must attach the greatest importance to those communications that are the most practical. There has been sufficient display of fencing in reference to the numerous points on which differences of opinion prevail, and it is now time to take our Pharmacopœia as a standard, and disseminate as much information about it as possible.

Cholera Prospects.—We have on several distinct occasions warned our readers against the forgetfulness of a possible return of the epidemic, and urged the necessity of continued vigilance. In London, one death has already appeared in the Registrar-General's report, as possibly arising from that disease. There is considerable doubt, in the absence of a post-mortem examination, what was the real cause of death, but there is no doubt whatever that diarrhœa was prevalent at that time in the neighbourhood. We should be very sorry to act as alarmists, but it is impossible to conceal the existence of certain indications that might serve as warnings to all in authority to take every precaution. In Russia we are aware that the epidemic can scarcely be said to have completely died out, for every now and then a fresh crop of cases has appeared. In St. Petersburgh, Moscow, and other towns, several cases have recently occurred in succession, and may well excite suspicion. On the other hand, the news from Mecca is satisfactory, and, we trust, that place will not again become a focus of disease.

The Medical Council.—The first meeting of the Session is fixed to take place on the 29th, so that all petitions intended to be laid before this body should be forwarded immediately. In connection with this subject we may notice that a proposal has been made by the editor of the *Medical Mirror*, to secure the representation of the profession at large in the Council. It is argued that members elected by the whole body of the profession would afford some balance against the nominees of the Corporations and the Crown, but it is not easy to comprehend how the various discordant interests in the Council could be neutralised by the introduction of a new element, unless a great numerical superiority be given to it. The Crown Nominees on the Council were placed there as the unprejudiced representatives of the public, and we cannot see that the clue to an adjustment of contending parties will be found in the raising up of new contentions.

University Representation.—We are glad to see that one of our contemporaries has adopted the view we have several times advocated respecting the Representation of the Universities. It is strange that at present the Government cannot be induced to go further in this direction than the offer of one Member to the London University. Should their present measure be carried it will be necessary to insist, in the strongest manner, on an equal justice being done to each of the unrepresented Scotch and Irish Universities, in the promised *Reform Bills* for those kingdoms.

A Medical Teacher's Association.—The best method of educating students, the surest way of affording them every opportunity of becoming efficient practitioners, and many other points of the greatest interest to all who are or have been actually engaged in the great work of training young men for the responsible duties of our Profession, are all subjects on which a little intercommunion of teachers may be highly desirable. We are, therefore, glad to learn that an Association of the medical teachers in the London Schools is being formed for the purpose of discussing this matter in all its bearings. We cordially wish the Association success, and beg to add that a similar movement in each of the Provincial Schools might also furnish equally valuable suggestions. Suppose an independent Association of the teachers in each of the towns where there are Medical Schools to be called into existence, how easy it would be to arrange for a congress or other mode of union for joint discussion. This would be better than branches of the Metropolitan Association, because it would keep all local matters separate, and each society would be supreme in its district, and therefore command more respect. Teachers of Dublin, Edinburgh, Glasgow, Cork, Belfast, Birmingham, Liverpool, and all other Medical Schools, is it not worth your while at once to make this effort for union?

A French View of the Clitoridectomy Dispute.—The following translation from *La Médicine Contemporaine* has been sent us for publication :—"The English mind has such a spice of prudery—a timidity and a modesty so ready to take alarm, that words in most common use startle it, and spread a bashful blush over countenances the least susceptible of shame. Never in presence of an Englishman pronounce the word *drawers;* never give utterance to the word *chemise*—if you have to speak of the *thighs* or of the *breeches* which cover them, use a circumlocution, and indicate, without naming them, the things of which the utterance is so offensive. The ancients, in order to restrain the excessive incontinence of certain females, frequently amputated the clitoris; but that operation for more than a century seems to have been discontinued, and even formally rejected, although Robert had practised it with success, as to its physical and moral effects, upon a young girl reduced to imbecility by habits she could not overcome, and, notwithstanding the advice of P. Debreyne, who actively endeavoured to revive that ancient practice, in which he saw no danger, and found great advantages. That operation of Robert, an idea, it would seem, derived

from the Greeks, and that opinion of P. Debreyne, has produced scarcely any sensation in France. But in prudish England, Mr. B. Brown, a surgeon who owes his reputation to ovariotomy, performed also clitoridectomy when he considered it proper, that is, as often as Lisfranc cut the neck of the uterus. This was considered an abuse, and it was decided in the Obstetrical Society to make it a ground of accusation against Mr. Brown. All London was excited by the news. The journals resounded it, and publicly took part, some against, and others in favour of Mr. Brown. These last, in this important crisis, gave him open proof of esteem and sympathy. Yet he succumbed, and his colleagues in the Obstetrical Society voted his expulsion. This grave decision led Mr. Brown to resign his connection with the Medical Society of London. It is exceedingly difficult to know in this matter on which side justice lies, yet, if we may credit the grounds of condemnation, Mr. B. Brown carried his enthusiasm so far, as to dilate in public, the two sexes being present, upon the advantages of his operation."

Omnipotent Quackery.—The advertisers of the quack nostrums of the old world are not slow to claim wonderful and diametrically opposed actions for their drugs, but they are eclipsed by their brethren of the new world, who save trouble and the expense of advertising a list of the diseases which their pills will cure, by laying claim to absolute omnipotence and infallibility. We extract the following amusing circular from an American journal:—

New Havem, Conn., February 27th, 1867.

Dear Sir,—My object in writing to you is to inform you of the Great Life Regulator.

It certainly is the greatest gift from Heaven to us as a people for the healing of our bodies. It instantly cures all forms of sickness, and in the shortest space of time heals the body from all diseases.

It is for this I take the pleasure of informing you of this great remedy, that you may become acquainted with a medicine which will in all cases, under all circumstances, be sure to give health to the sick.

Its accurate time in curing the sick in all cases, where they have not long been confined to their bed, is from one to eighteen hours.—Wishing you much happiness and health, M.D.

THE SANITARY CONDITION OF THE FEDERAL ARMY IN THE LATE CIVIL WAR.

The fatigues and privations of a soldier's life in time of war, give him a full claim to the benevolence of the country whose interests he is armed to uphold. It is next to impossible to estimate the amount of evil to which he is exposed, arising from hard labour, sustained effort, weather, disease, fierce struggle, wounds, and lingering death. Considering he is put in that position, not for his own interest chiefly, but for that of the whole community, it becomes those who reap the benefit which he secures for them, to lighten those evils in every possible way they can. Generally speaking, in civilized countries there is no backwardness in performing such duty. The enthusiasm felt in a popular cause, awakens a sympathy with the actors and sufferers in the ranks, though often-times the crisis in which an army is brought into the field, and the ineffective military arrangements which were made, defeat, in a great measure, the efforts of those at home to provide for the necessities of the soldiers who are out fighting the battle for them.

Such was the case in America at the commencement of the late struggle between the North and South. The moment a call for troops was made, the philanthropists of New York called a meeting, and formed what was termed the "Women's Central Association of Relief." The object proposed was, in their own words, "to collect and disseminate information upon the actual and prospective wants of the army, establish recognised relations with the medical staff, and act as auxiliary to it, and maintain a central depot of stores, and open a bureau for the examination and registration of nurses." Excellent as was the intention, the obstacles which stood in the way of its accomplishment were of no ordinary kind. The first regiments, apart from the regular army, which it was necessary largely to augment, were composed of the young men of the militia and volunteer companies who had never seen actual service, and were therefore less able to endure the efforts required of them, and more likely to suffer from the difficulties of the struggle to which they were committed. The officers, too, were ignorant, in a great measure, of the duties of their position; while the men, young, proud, unaccustomed to strict discipline, were reluctant to bow to those, higher in rank it is true, but almost as deficient in real military knowledge as themselves. There was, in consequence, no regularity, no steady order, no strict sanitary measures adopted, and there followed, as might have been expected, a state of things deplorable to behold. The conveyances which brought the men to the capital were cattle cars, crowded to excess, and with no means of relief for the sick. No provision was made for them on their arrival there. "For hours they stood broiling in the sun, or drenching in the rain," and when at last they reached their camps, unwholesome rations were served out to them, and rotten straw and a shoddy blanket provided as the only means of repose. No wonder that diseases common in camps, but which, if proper precautionary measures are taken, may be almost entirely banished, should threaten the destruction of nearly half those unhappy volunteers.

It was on this emergency that the Association began its labours. Its members naturally expected that the medical department of the army would encourage their efforts, but they were almost immediately destined to disappointment. They were considered by the officers of the Medical Staff to be unnecessarily intruding into a sphere where their assistance would be of little or no value; and representations were made to Dr. Bellows, under whose directions the Association was organised, and who was their delegate at New York, which induced him to return with the conviction that "ample preparations were already made." The ladies, however, true to their nature and their instincts, were not thus to be defeated and turned aside from their labour of love. They began to prepare lint for dressing wounds, to choose women and train them for nurses, and soon decided on making another effort to gain the notice and sympathy of the authorities. Four gentlemen were accordingly sent to Washington, who succeeded in obtaining an interview with General Scott, and next with the head of the Medical Bureau. The same coldness and indifference to their object was manifested—and they then proposed a mixed Sanitary Commission, but all to no purpose—they could not be heard. They had, however, made themselves *felt* in high quarters; and it was not long before the Acting Surgeon-General recommended the appointment of five gentlemen, including two of their number "to enquire and advise on sanitary points." The Government at length consented; but their full action, as a commission, was delayed by the opposition of a new Surgeon-General. Subsequently, they had sufficient influence to request his dismission, which was complied with by the authorities, when a candidate supported by themselves was advanced to the post, and the object of all their earnest desires attained.

After this, the course of the Commissioners was plain and unopposed. Government had given them its sanction. Like earnest men they began to perform the work of humanity they had undertaken. "Two general committees were soon appointed—one for inquiry, the other for advice;" and the disclosures, resulting from their investigation, unveiled the wretched and pitiable condition of men with no effective military discipline. No one to provide for those exigencies on which their health mainly depended. No drains in their overcrowded camps. No clearance of the disgusting effluvia from the sinks. No free air, but an infected atmosphere surrounding them all the night. No proper clothing. No regard to personal cleanliness. No green vegetable supplied, and a consequent amount of scurvy

which threatened to decimate the whole effective force. Close upon this came the battle at Bull's Run, and no wonder that men in this state of degeneracy should be totally vanquished by a force far less numerous than their own. Inquiry was again set on foot by the Commission immediately after this disastrous defeat. Various questions were put both to officers and men who had been engaged in the fight. Information was carefully collated, and a fearful revelation—which it was judged proper to refrain from publishing at the time—was brought to light. A short quotation from a subsequent report will give an insight into its nature. At Washington, after the battle, it is said :—

"The appearance of the streets was in the strongest possible contrast to that which could be imagined of a city placed by a strong necessity under the severe control of an effective military discipline. Groups of men, wearing parts of military uniforms, and some of them with muskets, were indeed to be seen; but upon second sight they did not appear to be soldiers. Rather they were a most woe-begone rabble, which had, perhaps, clothed itself with the garments of dead soldiers left on a hard-fought battle-field. No two were dressed completely alike ; some were without caps, others without coats, others without shoes. All were alike excessively dirty, unshaven, unkempt, and dank with dew. The groups were formed round fires made in the streets of boards wrenched from citizens' fences. Some were still asleep at full length in the gutters and on door-steps, or sitting on the kerbstone, resting their heads against the lamp-posts. Others were evidently begging for food at house doors. Some appeared ferocious, others only sick and dejected, all excessively weak, hungry, and selfish. There was no apparent organisation ; no officers were seen among them; seldom even a non-commissioned officer. At Willard's Hotel, however, officers swarmed. They, too, were dirty and in ill condition; but appeared indifferent, reckless, and shameless, rather than dejected and morose."

Military Hospitals were provided by the Commission for the large crowds of sick and wounded men. Buildings had been hastily appropriated for this object, but utterly inadequate to the necessities of the case ; while the attendants, the nurses, and the staff were not equal to the task they had to perform. Further accommodation was, therefore, absolutely necessary, and the importance of the efforts made by the Commission in this direction, was so sensibly felt, that the Government gave them its decided support. "Five model buildings" were erected, where army patients have been received and attended during the whole of the war. By their means, also, a service of transport boats conveyed the sick and wounded to the general hospitals, and railway cars were fitted up with litter beds swung in each, besides a broad couch and invalid chairs, with medicine, utensils, food, indeed every article furnished which would contribute to the comfort and well-being of the patient, however unfavourable the weather, or long the journey. Depots of hospital stores and drugs were fixed near the seat of war, and every relief possible afforded to the bodily or mental anguish of the sufferer. The medical authorities, too, began to appreciate the services of these men, and to work harmoniously with them, and when their waggons appeared on the battle-field, inscribed "U. S. San. Com.," even surgeons were heard to exclaim "Thank God, here comes the Sanitary Commission ; now we shall be able to do something."

By such means, and others as well, these devoted and noble-minded men endeavoured to relieve the pain and sustain the courage of the wounded and the diseased. No adequate preparation had been made by the Government, and but for their voluntary and untiring devotion no one can tell how much the amount of suffering would have been increased, or how many more would have died miserably in the field during those years of internécine war.

QUARTERLY RETURN OF THE REGISTRAR-GENERAL.

Little or no relative difference is found in the figures and facts of the Registrar-General, as we trace his quarterly steps from time to time, and listen to his warnings or his congratulations, as the balance of the death-rate vibrates upwards or downwards. In ordinary seasons we look for the estimated number of figures, and we generally find them. When severe weather has intervened or some epidemic laid its fell grasp upon the terrified population, marking out first one locality and then another for its fearful intrusion, we are prepared to hear that the "mourners have gone about the streets" in far larger proportions, and so the report invariably shows it to have been. Even commercial prosperity or abatement leads us to expect some variation in the numbers to be recorded, and almost always our anticipations are found to be correct. There is little or no interest therefore in following his figures for their own sake, just to see how many have died one season more or less than another, or how the marriages and births rose or sunk ; but still his returns are important, and it is well they should be regularly exposed to our view. Otherwise, we might remain ignorant, or grow careless of threatening dangers, and consequently neglect the means necessary for self-preservation and health.

From his report of the last quarter, it appears that the general health in England and Wales has been in a better state than in the same quarter of the last three years. In the winter quarter of 1864 the deaths were 142,977 ; in 1865, 140,410 ; in 1866, 138,233 ; and in the present year 134,254. Indeed, taking the indication from the marriages and births as well it would seem that the public health has been really improving during those years. The fact which has swelled the death-rate in 1866, is the prevalence of cholera. But for this it would have steadily decreased all that time.

During the quarter whooping-cough, small-pox, and measles, which are principally children's diseases, have been most prevalent, but, in some places, the old and infirm have suffered severely from the cold, and the mortality among that class has been great, which is not to be wondered at, considering the abrupt and unusual variation of the temperature.

The annual rate of mortality in the whole kingdom for the winter quarter was 26 per 1000—it was 27 for the town, and 23 for the country districts generally. But the returns, though favourable on the whole, show that mortality has varied in different districts. It has been least in the Eastern counties, particularly in Yarmouth and Norwich; very little more in the South-Eastern, but largest in the South-Midland. In the thirteen large towns in the kingdom it has also varied considerably. In London it was 26·78 per 1000; in Newcastle, 37·10; in Dublin it was 34·62 ; in Manchester, 33·81 ; in Glasgow and Liverpool, slightly less ; in Bristol, 25·50 ; in Birmingham, 25·35 ; in Hull 25·23. The difference of position and climate seems not enough to account for this discrepancy in the death-rate of these several towns, and it is a question worthy of consideration whether it may not be traced to the habits of the people, to the care which some of them take, and the indifference manifested by others to those sanitary regulations which are necessary to secure immunity from the attacks of consequent ravages of disease.

Proceedings of Societies.

HARVEIAN SOCIETY OF LONDON.—April 10.

Dr. Pollock, President.

THE PREVENTION OF VENEREAL DISEASES.

Present—Dr. Chapman, Mr. Curgenven, Dr. C. Drysdale, Mr. Gascoyen, Dr. Tilbury Fox, Mr James Lane, Dr. Meredyth, Dr. Menzies, Mr. Sedgwick, Mr. De Meric, Mr Holmes Coote, Mr. R. W. Dunn, Dr. Victor Bazire, Dr. A. Vintras, and Mr. Berkeley Hill.

The following reports were read :—

Dr. Steele reports from Guy's Hospital, that in 1866 there were at Guy's Hospital, 36,600 ordinary surgical cases; 2500 disease of the eyes ; 700 of the ear ; 700 of the skin. Of the surgical cases it is stated that nearly 24,000, or two-thirds, of the surgical cases are venereal. Among medical cases the

venereal cases are estimated at about 5 per cent.; among diseases of the eyes about 10 per cent.; and of the ear about 5 per cent.; among disease of the skin about four-fifths of the cases are said to be venereal. Amomg female diseases above 10 per cent. are said to be venereal. Dr. Steele calculates that there are about 26,000 venereal cases annually seen at Guy's Hospital, or about 43 per cent. of all cases seen. There are 55 beds for venereal patients—25 for males and 30 for females, and about 50 occupants of these beds daily.

Mr. Hill's report from the Royal Free Hospital, Gray's Inn Road, gives the daily number of venereal patients treated at that Hospital as 117·2. This number is in the proportion of 3·8 to the number of surgical patients seen daily. There are 26 beds for female lock patients; the males are only admitted when the cases are urgent, and are then placed in the ordinary surgical wards. On an average, about two of such beds are occupied by men.

Dr. Gillespie's report from the Lock Wards of the Royal Infirmary, Edinburgh, gives an average of 20 cases daily treated, which is in the proportion of 1:8 of the whole surgical patients in the Infirmary. There are 26 beds for venereal patients in the Hospital. "Occasionally stray cases of primary venereal diseases are treated in the general surgical wards, and secondary and tertiary cases are constantly admitted by the physician into the general wards."

The report from the Royal Infirmary of Glasgow shows a daily average of 20 venereal cases treated, or 1 in 12 of the whole surgical cases treated. There are no special beds for lock cases.

In the report from Dr. M'Leod, from the Glasgow Lock Hospital, it appears that there are 38 in-patients—no out-patients in that hospital—on an average. There are 45 beds in that hospital.

In the report by Mr. Newett, from the General Hospital, Belfast, it appears that the average number of venereal in-patients is 6. There are no venereal out-patients. This number is, to the whole daily number of surgical patients seen, as 1 : 17·5. No beds are specially set apart for male patients. There is a small ward for females.

In the report by Mr. Chance, from the Metropolitan Free Hospital, Devonshire-square, London, it is stated that there is an average daily attendance of 280 out-patients, and Mr. Chance estimates the number of venereal cases among these as about one-third. There are no in-patients lock cases.

The report by Mr Mickley, from Nottingham General Hospital, gives a daily average of nine venereal cases, in and out-patients, or about one-fifteenth of all the surgical cases seen. There are eight beds for such cases: never all occupied at once. "Most of the cases that do come are cases of secondary syphilis. Primary sores and cases of gonorrhœa, are very seldom seen. A certain class of practitioners and the quacks get hold of them all."

The report from the North Stafford Hospital shows nine in and eight out-patients daily, in the proportion of 1:32 to the whole number of surgical cases seen.

The report from the Hull General Infirmary shows a daily average of 14 venereal patients, or one-seventh of the surgical cases seen. There are no venereal beds in the hospital.

In Dumfries, according to Dr. Watson, there are scarcely any venereal patients—only one in eight days; and there are no beds for venereal patients in that hospital.

In the Herbert Hospital, Woolwich, the report from Surgeon-Major Dr. Guy gives the daily average of in and out-patients as 84. All venereal cases in the army are treated in hospital. In the ordinary surgical non-venereal wards the average number under treatment is 53. There are three lock wards, each containing 32 beds, for treatment of venereal disease, and as many additional beds as are required can be added.

Dr. Menzies reports from the Western General Dispensary, Paddington, that the proportion of venereal cases to the surgical cases daily seen is as 1:10. A few cases of the sequelæ of syphilis are occasionally seen by the physicians, but not in sufficient numbers sensibly to alter the above ratio.

The following statistics of prostitution were furnished to the committee by Mr. Gascoyen, from the blue-book entitled "Judicial Statistics for 1865." The total number of prostitutes in England and Wales in September, 1865, was 27,548, and the total number of brothels and houses of ill-fame was 6949, out of a total population of 20,990,946, of which 10,180,820 were males, and 10,810,125 were females. In London, according to the same statistics, there were in September, 1865, 5911 prostitutes, and 1193 brothels and houses of ill-fame, out of a population of probably more than 3,000,000. In 1861 the population of London was 2,803,989.

Mr. James Lane thought that it would be better in future for the committee to concentrate their attention upon the quantity of venereal disease in two or three towns, such as London, and perhaps a seaport and inland town.

Mr. Gascoyen remarked that in country districts there was scarcely any venereal disease. It was in the large towns that it was so frequent.

It was resolved that the secretary should communicate with the medical men in London, Manchester, Southampton, Salisbury, and Norwich, and endeavour to get at the extent of venereal diseases in these four typical cities.

Mr. De Meric suggested that some private practitioners should be asked as to the numbers of their venereal patients yearly.

Mr. Coote and other gentlemen believed that this would be a difficult matter to perform, and that the results would not prove trustworthy.

Mr. De Meric wished to know whether the committee intended to cause and enforce examinations and detention in hospital of all diseased women. At present they leave hospital when they think fit, even when diseased. Were they to be kept in, again, until even the slightest amount of purulent discharge was gone?

Mr. James Lane thought that they should not be allowed to quit hospital till perfectly well, and that examinations should be enforced.

Mr. Holmes Coote thought that, to be of any use, stay in hospital must be rendered compulsory until the patients were cured, as they at present were in the habit of leaving whenever any festive occasion occurred, as at Christmas, &c.

Mr. Berkeley Hill said that small-pox and fevers were separated from the rest of the community, and there was no reason why this should not be done in the case of venereal diseases.

Mr. Dunn also agreed that examinations ought to be made compulsory.

Dr. Chapman thought that the Government had a perfect right to pass any measure it pleased to protect its own paid servants in the Army and Navy; but he maintained that in civil life that society had not a similar right over the persons of women who prostituted themselves. As long as they were treated with such contumely at hospitals, as they were now, it was natural they should not care about entering them, or remaining in them; but if they were treated with kindness, and forced to sign a written agreement to remain in until cured, he thought this would serve instead of forcible measures. He therefore proposed the following motion:—

"This committee deplores the great and increasing amount of venereal disease in this country, and recognises the urgent need of an ample provision for its efficient treatment; but, while admitting the right of the State to protect its paid servants—the Army and Navy—from the influence of the venereal contagion, by the adoption of any measures which shall seem to it best, this committee would view with grave apprehension the application of the 'Contagious Disease Act' to prostitutes generally, or any attempt to 'protect' the general population by submitting to registration and compulsory medical supervision the large class of women throughout the country who are known, or supposed to be, acting as prostitutes."

Dr. C. Drysdale said that there were so many points in the motion made by Dr. Chapman in which he agreed, that he would second it if only to hear the subject discussed. He thought that the registration and police control of women was in many respects very undesirable, since it treated that sex as if they were to be suffered to be in perpetual nonage. And although he was well aware (and had stated the same fully in a pamphlet he had published on the subject) that this registration and forcible examination had very much lessened the prevalence and extent of venereal diseases in France, Belgium, Norway, and other Continental states, still the very fact of the French having proposed this as a subject for discussion at the ensuing International Congress in Paris, in August, showed how many deficiencies there were in the system of police interference. For his own part, he believed that the main cause of the extreme prevalence of the venereal diseases in our large cities was to be traced to the way in which prostitutes were treated at hospitals and public institutions. In many hospitals there were no beds for them, and in almost all they were treated with much harshness, so that there was little wonder that they stayed as little time as possible in the wards, and that they cared also little for the fate of others. The true Christian spirit would point towards alleviating the evils of prostitution

so long as that frightful evil existed, and not stamping the women with a police badge, as was done in Foreign States, where ideas of individual liberty were certainly less enlightened than in England or America.

Mr. HOLMES COOTE said that if this motion was carried, he believed that nothing could be done by the Committee. There was plenty of provision for women in garrison towns, yet they went out whenever they pleased, even when diseased, and so in St. Bartholomew's Hospital the beds were often empty at Christmas, and whenever the occupants thought that they could get plenty of customers.

Mr. CURGENVEN spoke in favour of registration.

Dr. VINTRAS said that it was necessary to compel prostitutes to be examined. No voluntary system would succeed with them, and in Paris it was found that they never showed their certificate of examination, but carefully concealed it. One difficult point was the definition of the word *prostitute*.

Mr. SEDGWICK said that the liberty of the subject had often been attacked for the public good, as in the case of overcrowding of the poor in large towns, and in cases of Vaccination Acts, etc., certain houses in poor districts were liable to be entered at all hours by the police to prevent overcrowding, etc.

Dr. BAZIRE thought that unless women were compelled to be examined they would not come. In hospitals where there were many students they also would not come.

Dr. CHAPMAN'S motion was then put to the meeting, but lost; there being a majority of fifteen members against it to two for it.

Mr. JAMES LANE said that he would move the following motion as an amendment. He did so because he believed that any voluntary system would prove inoperative, and he thought that the public might be prepared for a compulsory system, as a question of hygiene. Compulsory examination of the healthy as well as diseased prostitutes should be carried out, and there should be no certificate of health given to the woman herself.

The following amendment was moved by Mr. JAMES LANE, and seconded by Dr. TILBURY FOX :—

"That regulations similar to those contained in the Contagious Diseases' Prevention Act, 1866, might be carried out by the police, without difficulty, among the civil population in London and other large towns, the essential feature of the system being as follows :—

"That a register af all women known to be acting as prostitutes should be kept by the police. That such women should be required to submit themselves to a periodical examination by a medical officer, appointed for that purpose, and that, when found to be suffering from venereal disease, they should be detained in hospital till cured—additional accommodation being provided for that purpose.

"It is desirable that the registration of women above suggested should be kept for the private use of the police authorities only, and should be in no way accessible to the public ; also, that no certificate of health should be given to the women on the occasion of their periodical examinations, and that, when discharged from hospital, the certificate of cure should not be given to the women themselves, but be forwarded to the police authorities.

"The object of legislative interference should be solely the prevention and cure of venereal disease ; and it is believed that this desirable end would be, to a great extent, obtained by regulations such as those above suggested, which would be sanitary in their operation, and which would involve no public recognition of prostitution, and no registration of prostitutes or of houses used for the purpose of prostitution that would be available to the public."

This amendment was put to the meeting by the President, when fifteen members held up their hands in favour of it, and only two against it. It was therefore declared to be carried. The business of the next meeting will, therefore, be to consider the details of the question relating to the police registration and examination of prostitutes, and to receive reports from London, Southampton, Norwich, Salisbury, and Manchester.

BELFAST BRANCH OF THE ROYAL MEDICAL BENEVOLENT FUND SOCIETY OF IRELAND.

THE stated quarterly meeting of this local branch of the above most excellent and useful society was held on the 1st inst., in No. 33, High-street, and amongst those present were—Dr. T. H. Purdon, the permanent president of this branch, who occupied the chair ; Dr. Patterson, Dr. Ferguson, Dr. James Moore, Professor Cuming, M.D. ; Dr. Keown, R.N. ; Dr. Whitaker, Dr. Wilberforce Arnold, Dr. Filson, Portaferry ; and Dr. Stewart, honorary secretary.

A letter was read from Dr. B. G. Grattan Guinness, honorary general secretary, Dublin, calling attention to the annual meeting of the society, to be held next month in the Royal College of Surgeons, for the distribution of funds and the transaction of general business, and requesting a *resume* of the proceedings of this branch for the past year as usually supplied, and which was directed to be furnished accordingly.

After the reading and disposal of several other communications, the consideration of applications for assistance from those belonging to the Counties of Antrim and Down was proceeded with ; and each case having been particularly inquired into and found to be a proper object for relief, all as presented were passed, and recommended to the Parent Society for grants as liberal as the funds at command would admit of and the necessity of each appeared to demand. The report of the contributions of this branch to the present time was more favourable than as compared with the corresponding period last year ; but the subscriptions of several being still unpaid, it was earnestly requested that they would be sent in as immediately as possible ; and Dr. Moore's service as a deputation to country localities on behalf of the society, hitherto so successful, were asked again on the present occasion, and kindly acceded to. It was also agreed upon that the Secretary should make special application to those Members of the Profession who had not hitherto afforded any assistance to the Society, soliciting their aid, even in the smallest sums, the Society's usefulness in giving efficient relief chiefly arising from what was received by annual subscriptions. The following subscriptions were reported to have been recently received :—Rev. William O'Neil, Shane's Castle, per Dr. Spearing, £12 ; Dr. Stephenson, £5 ; Dr. T. Reade, £1 1s. ; Dr. Filson, £1 1s. ; Dr. Wheeler, £1 1s. ; Dr. Scott, 4th Battalion Rifle Brigade, £1 ; Dr. M'Clelland, Banbridge (for 1866), 10s. 6d. ; Mr. Strain, Newtownards, 10s. ; Mr. Pring, 10s. ; Surgeon Smyth, 10s. 6d. ; Dr. Warwick, 5s. ; Dr. Murland, 5s. ; Dr. Heron, Katesbridge, 5s. ; Surgeon Harman, Ballyward, 5s. ; Mrs. M'Clenehan, Rathfriland, 5s. ; Dr May, do., 5s. ; Thomas Ferguson, Esq., Banbridge, per Dr. Malcomson, £1 1s ; Dr. Rowan, per do., 10s. ; Dr. Malcomson, 10s. Some further business having been disposed of, thanks were given to the chairman, Dr T. H. Purdon, for his great readiness and liberality on behalf of the best interests of the society, and the meeting separated.

METROPOLITAN POOR ACT, 1867.

As this important measure, if found to work well in London, is likely to be extended to the rest of the Kingdom, we furnish a complete abstract of its provisions.

1. This Act may be cited as the Metropolitan Poor Act, 1867.

3. Limits the Act to the Metropolis.

4. Limits orders of Poor-law Board.

DISTRICT ASYLUMS.

5. Asylums to be supported and managed according to the Provisions of this Act may be provided under this Act for Reception and Relief of the Sick, Insane, or Infirm, or other Class or Classes of the Poor chargeable in Unions and Parishes in the Metropolis (and in this Act the Term "Asylum" means an Asylum provided under this Act).

6. In order to the Provision of Asylums, the Poor-law Board may from Time to Time by Order combine into Districts, Unions or Parishes, or Unions and Parishes, in the Metropolis, as they think fit, and may from Time to Time alter any such District by Addition, Sub-division, Separation of Part or otherwise (and in this Act the Term "the District" means, in relation to each Asylum, the District for which that Asylum is for the Time being provided).

7. For each District there shall be an Asylum or Asylums, as the Poor-law Board from Time to Time by Order direct.

8. Incorporates the managers of Asylums.

9. The Managers shall be partly elective and partly nominated.

10. Elective Managers shall be from Time to Time elected by the Guardians of each of the several Unions and Parishes forming the District from among themselves, or from among Ratepayers qualified to be Guardians therein, or partly from one and partly from the other.

11. Nominated Managers shall be from Time to Time nominated by the Poor-law Board from among Justices of the Peace for any County or Place resident in the District, or from among Ratepayers resident in the District and assessed to the Poor Rate therein on an annual rateable Value of not less than Forty Pounds, or partly from one and partly from the other.

12. The Poor-law Board shall from Time to Time by Order prescribe the total Number of the Managers, and the Proportion of the Elective and Nominated Managers, (but so that the prescribed Number of the Nominated Managers do not ever exceed One Third of the prescribed Number of the Elective Managers), the Number of Elective Managers to be elected for each Union or Parish in the District, the Qualifications of the Managers, their Tenure of Office, the Mode and Times of Election, and the Quorum for their Meetings.

13. Provides for the Validity of Acts of Managers notwithstanding Vacancies.

14. Prohibits Managers being concerned in Contracts.

15. The Poor-law Board may from Time to Time by Order direct the Managers to purchase or hire, or to build, and (in either Case) to fit up a Building or Buildings for the Asylum, of such Nature and Size, and according to such Plan, and in such Manner, as the Poor-law Board think fit, and the Managers shall carry such Directions into execution.

16. The Managers shall have for the Purposes of the Asylum the like Powers as are for the Time being vested in Guardians of Unions or Parishes in the Metropolis relative to the Purchase or Hiring of Lands or Buildings; but the Consent of any Ratepayers or Owners of Property in a Union or Parish shall not be necessary with respect to any Sale, Lease, or other Disposition of any Workhouse, Building, or Land by Guardians or Overseers to the Managers.

17. The Managers may borrow Money for purchasing Lands or Buildings, and for building, fitting up, and furnishing Buildings erected or hired for the Asylum, according to the Provisions of the Poor-law Acts under which Guardians are for the Time being empowered to borrow Money, and may charge the Poor Rates of the Unions and Parishes forming the District with the money so borrowed, and Interest, subject and according to the following Provisions:

(1). The Amount borrowed shall not exceed One Third of the aggregate annual Expenditure on the Relief of the Poor within the whole District (exclusive of Reimbursements) for the Period of Three Years ending on the Twenty-fifth Day of *March* next preceding the borrowing of the Money:

(2). The Amount borrowed shall be charged on the Poor Rates of the several Unions and Parishes forming the District in the Proportions in which they contribute to the Maintenance of the Asylum:

(3). The Amount borrowed shall be paid off, with Interest, by equal annual Instalments not exceeding Twenty.

18. The Poor-law Board may by Order direct that any Building for the Time being in use as a Workhouse be, with such Alterations as the Poor-law Board think fit, used for the Asylum, and thenceforth that Building shall be for the common Use of the District accordingly; and an annual Sum in the nature of Rent or other Compensation of such Amount as the Poor-law Board from Time to Time direct shall be paid to the Guardians of the Union or Parish to which such Building belongs, as long as the same continues to be so used.

19. Secures reimbursement to Managers of Expenditure.

20. Relates to Furniture, &c., for Asylum.

21. The Mode of Admission of Persons into the Asylum shall be such as the Poor Law Board from Time to Time by Order direct.

22. The Managers shall have the like Powers as Guardians for the Relief, Maintenance, and Management of the Inmates of the Asylum, and shall from Time to Time provide such Medicines, Appliances, and Requisites for the Medical and Surgical Care and Treatment of the Inmates, and cause the same to be furnished and used according to such Rules, as the Poor Law Board from Time to Time by Order direct.

23. The following Provisions of the Poor Law Amendment Act of 1844 shall extend to the Asylum as if it were an Asylum under that Act or a Workhouse, and as if the Managers were a District Board under that Act, that is to say,—

So much of Section Forty-three as relates to Rules of the Poor Law Board for Government of the Asylum or its Inmates, and to religous Assistance and Instruction:

Sections Fifty, Fifty-four, Fifty-seven, and Fifty-nine.

24. With reference to Chargeability, Burial, and other Incidents, the Asylum shall in relation to each Inmate thereof be deemed to be in the Union or Parish from which such Inmate is sent; but Births and Deaths in the Asylum shall be registered by the Registrar in whose District the Asylum is situate.

25. The Managers shall have the like Powers as Guardians for the Appointment, Control, and Payment of paid Officers of the Asylum, and the Grant of Superannuation Allowances to them.

The Duties, Number, and Salaries of the paid Officers, and the Securites to be given by them, shall be such as the Poor Law Board may from Time to Time approve or by Order direct.

26. Legal and reasonable Orders of the Managers shall be obeyed, and Obedience thereto shall be enforced, in like Manner and by and under like Remedies and Penalties as legal and reasonable Orders of Guardians.

27. The Managers may from Time to Time, subject and according to such Regulations as the Poor Law Board from Time to Time by Order prescribe, appoint Committees of Members of their Body, and delegate to them any of the Powers of the Managers.

28. The Managers shall, in the Exercise and Discharge of all their Powers and Duties, be subject to Orders of the Poor Law Board in like Manner as Guardians are under the Poor Law Acts.

29. Where the Asylum is provided for Reception and Relief of the Sick or Insane it may be used for Purposes of Medical Instruction, and for the training of Nurses, in such Cases and Manner and subject to such Regulations as the Poor Law Board from Time to Time by Order direct.

30. Where the Asylum is provided for Reception and Relief of the Insane the Commissioners in Lunacy may, if they think fit, depute one of their Body or appoint from Time to Time a special Commissioner, and the Person so deputed or appointed shall be entitled to attend Meetings of the Managers and to take part in their Proceedings, but not to vote; and every such Asylum shall be considered as a Workhouse within the Meaning of the Lunacy Acts as defined by the Twenty-fifth and Twenty-sixth *Victoria*, Chapter One hundred and eleven.

31. Expenses of providing Asylum and Salaries.

32. Charges for Maintenance, &c.

33 to 37 provides for audit of accounts, &c.

MEDICAL OUT-DOOR RELIEF.

38. The Poor-law Board may from Time to Time, by Order, direct the Guardians of a Union or Parish in the Metropolis to provide a Dispensary or Dispensaries for such Union or Parish, and to purchase or hire, or to build, and (in either case) to fit up and furnish a Building or Buildings for that Purpose, of such Nature and Size, and according to such Plan, and in such manner, as the Poor-law Board think fit, or to set apart, adapt, fit up and furnish for that Purpose such Part of the Workhouse of the Union or Parish, according to such Plans, and in such Manner, as the Poor-law Board think fit, and the Guardians shall act accordingly; and, where the Poor-law Board by Order so direct, the Guardians may borrow the Amount requisite in that Behalf, in like Manner and subject to the like Conditions as in the Case of the building of a Workhouse.

39. There shall be a Committee of Management for the Dispensary or Dispensaries in each Union or Parish, to be called the Dispensary Committee for the Union or Parish (and in this Act the Term "the Dispensary Committee" means, in relation to each Union Parish, the Dispensary Committee for the same for the Time being).

40. The Dispensary Committee shall be elected by the Guardians of the Union or Parish from among themselves, or from among Ratepayers of the Union or Parish, assessed to the Poor Rate on an annual rateable Value of not less than Forty Pounds, or partly from one and partly from the other.

41. The Poor-law Board shall from Time to Time prescribe with respect to each Committee the Number and Tenure of Office of the Members, the Mode and Times of Election, and the Quorum for their Meetings.

42. The Guardians of each Union or Parish providing a Dispensary shall also provide, according to the Directions of the Poor-law Board, proper places where the Medical Officers of the Union or Parish may see such of the Sick Poor as attend there for Advice, and where Meetings of the Dispensary Committee may be held.

43. The Dispensary Committee shall from Time to Time appoint and shall at all Times keep appointed proper Persons to be Dispensers of Medicine at the Dispensaries for the Union or Parish, and may from Time to Time appoint such

other Officers and such Servants for the Purposes of those Dispensaries as they think fit.

The Duties, Qualifications, Number, and Salaries of the Dispensers, Officers, and Servants shall be such as the Poor-law Board may from Time to Time approve or by Order direct.

44. The Guardians of each Union or Parish providing a Dispensary shall from Time to Time, on the Requisition of the Dispensary Committee, provide proper Medicines and Appliances and Requisites for the Care and Surgical Treatment of the Sick Poor of the Union or Parish relieved out of the Workhouse, and the same shall be dispensed and furnished to such of the Poor entitled to Relief as require the same, on the Prescription or written direction of the District Medical Officer, subject to such Regulations as the Poor-law Board from Time to Time by Order direct.

45. The District Medical Officers for a Union or Parish shall be from Time to Time appointed by the Dispensary Committee, subject to the Rules and Orders of the Poor Law Board respecting Appointment and Removal of Officers under the Poor Law Acts; but the District Medical Officers in Office at the Time of the Dispensary Committee entering on their Duties shall continue in Office as if this Act had not been passed, subject nevertheless to such Modifications of Arrangements respecting their Duties and Remuneration, made with them before the passing of this act, as the Poor Law Board think fit.

46. For giving Effect to the Provisions of this Act relating to Medical Relief out of the Workhouse, the Poor Law Board may from Time to Time vary as they think fit Medical Districts, Salaries, and Contracts with District Medical Officers, existing at the passing of this Act or at any time thereafter.

47, 48, and 49 provide for District and Separate Schools.

WORKHOUSES FOR CLASSES OF POOR.

50. Where, in the Opinion of the Poor Law Board, the Workhouse of a Union or Parish in the Metropolis is adapted only for the Reception of Poor Persons of a particular Class or particular Classes, but is capable of accommodating poor Persons of that Class or those Classes from any other Union or Parish within the Metropolis, the Poor Law Board may by Order direct the Guardians of the Union or Parish to which the Workhouse belongs to receive, lodge, and maintain therein poor Persons of that Class or those Classes, or any of them, and the Guardians shall receive, lodge, and maintain such poor Persons accordingly on terms to be agreed on, with the Approval of the Poor Law Board, by the respective Boards of Guardians of the Unions or Parishes concerned, or, in default of such Agreement, to be prescribed by the Poor Law Board by Order; and in every such Case the following Provisions shall have effect:—

(1.) Every poor Person so received into the Workhouse shall, while therein, be treated in all respects in like Manner, and be subject to the same or the like Regulations and Liabilities, as the other poor Persons therein, and shall be chargeable in the first instance to the Union or to the Parish in the Workhouse whereof he is received:

(2.) The abiding of any such poor Person in such Workhouse shall in all other respects be attended with the same legal Consequences as if the Workhouse were situate within the Union or Parish from which he is sent:

(3.) Every Guardian of the Union or Parish from which such poor Person is sent may at all reasonable Times enter the Workhouse and inspect any part thereof.

51 to 54 refer to Purchase and Management of Lands.

55 to 58 Regulate the Contributions of Unions and Parishes.

MEDICAL IN-DOOR RELIEF.

59. In order to facilitate Provision for the Appointment, where requisite, of Resident Workhouse Medical Officers, and for better Classification and Management of the Sick Poor in a separate Hospital or Building, or in an Infirmary kept distinct from the rest of the Workhouse, the Poor Law Board may, by Order, determine, or from Time to Time vary as they think fit, any Contract with any Medical or other Workhouse Officer existing at the passing of this Act, and direct the Guardians to pay to a Medical or other Officer affected thereby such Compensation by way of increased Salary, or of an Annuity, or of a gross Sum, or otherwise, as the Poor Law Board think fit.

HOUSELESS POOR.

60. Sections One and Two of The Metropolitan Houseless Poor Act, 1864, shall from and after the Twenty-ninth Day of *September*, One thousand eight hundred and sixty-seven be repealed, except with respect to any Claims under that Act then outstanding, which shall be provided for as if that Act continued wholly in force.

METROPOLITAN COMMON POOR FUND.

61. There shall be a Fund, called The Metropolitan Common Poor Fund, raised according to the Provisions of this Act by Contributions from the several Unions, Parishes, and Places in the Metropolis (in this Act referred to as the Common Poor Fund).

62 to 68 Regulate Appointment of Receiver, the Collection and Disposal of the Common Fund.

69. Expenses incurred for the following Purposes after the Twenty-ninth Day of *September* One thousand eight hundred and sixty-seven shall be repaid out of the Common Poor Fund, that is to say,—

(1.) For the Maintenance of Lunatics in Asylums, registered Hospitals, and licensed Houses, and of Insane Poor in Asylums under this Act, except such Expenses as are chargeable on the County Rate:

(2.) For the Maintenance of Patients in any Asylum specially provided under this Act for Patients suffering from Fever or Smallpox:

(3.) For all Medicine and medical and surgical Appliances supplied to the Poor in receipt of Relief by Guardians under this Act or any of the Poor Law Acts:

(4.) For the Salaries of all Officers employed by the Guardians in and about the Relief of the Poor by the Managers of District Schools under "The Poor Law Amendment Act, 1844," and by the Managers of Asylums under this Act, and also the Salaries of the Dispensers and other Persons employed in Dispensaries under this Act, provided the Appointments of the Officers have been sanctioned by the Poor Law Board:

(5.) For Compensation to any Medical Officer of a Workhouse affected by the Determination or Variation by the Poor Law Board of a Contract respecting medical Relief in the Workhouse, or for Compensation to any Officer of a Union or Parish who may be deprived of his Office by reason of the Operation of this Act:

(6.) For Fees for Registration of Births and Deaths:

(7.) For Fees for and other Expenses of Vaccination:

(8.) For Maintenance of Pauper Children in District, Separate, Certificated, and Licensed Schools:

(9.) For Relief of destitute Persons certified by the Auditor, and Provision of temporary Wards or other Places of Reception approved by the Poor Law Board, under the Metropolitan Houseless Poor Acts of 1864 and 1865.

70 to 72. Mode of Repayment out of Common Fund; Receiver's Salary, and Drawing on Receiver's Account.

73 to 82. Define the Constitution of Guardians for Parishes under Local Acts; the Powers of new Board of Guardians; the Transfer of Property to new Guardians; the Continuance of existing Officers; the Saving for rating Powers of existing Bodies. Power to Poor Law Board to nominate additional Guardians. Appointment of Officers on Failure of Managers, &c. Extension of Borrowing Powers, to any Sum not exceeding One Half of the aggregate Amount of the Rates raised for the Relief of the Poor in that Union or Parish within Three Years next preceding. Provision for Orders of Removal and of Maintenance.

Correspondence.

"BLACK DEATH."—DR. J. H. BENSON'S CASE.

TO THE EDITOR OF THE MEDICAL PRESS AND CIRCULAR.

SIR,—In your last number I see that Dr. Little objects to some of my remarks on a case of the so-called "black death" reported by me in your issue of the 24th April last.

One remark in particular he combats—viz., that "To the theory of those who are of opinion that this disease is connected with cerebro-spinal meningitis, this case at least lends no support."

Dr. Little has advanced the theory that "black death" is connected with cerebro-spinal meningitis, and many others have adopted it.

Without, for a moment, wishing to doubt that Dr. Little's theory *may* prove to be true, I am reluctant, I confess, to adopt

it until sufficient evidence of its truth be produced, and very unwilling to allow that *my* case "proves, in a remarkable degree," such a connection, as Dr. Little says it does.

The objection on the part of Dr. Little, to the remark referred to, probably arose from the fact that I neglected to describe, in my communication on the subject, the character of the congestion, which was marked in almost every organ of the body in a greater or less degree, and, among the number, on the brain and spinal chord. I am perfectly aware that the presence of the products of inflammation is not necessary to prove the existence of meningitis (though, as the patient was three days ill, there was time for such products to be formed), but the presence of, at least, capillary congestion is; and yet there was no such congestion whatever found on the most careful examination, during which it was looked for particularly. This I intimated when I said, "Neither on the upper or under surfaces of the brain, nor in its membranes, was there the least *sign* of recent inflammation to be found." And again, when speaking of the chord, "The substance of the same was of natural consistence, and not the least *trace* of inflammation was anywhere observable." The congestion was, to all appearances, passive, and only apparent in the larger veins, and in the sinuses.

The softening of the brain substance referred to was so very slight, that it was a matter of doubt among my colleagues, at first, whether it had any real existence; and certain it is that the softening was not inflammatory.

As to the fluid in the lateral ventricles, mere passive congestion would be quite sufficient to cause that without any inflammation. The same condition was found in the pericardium and in the areolar tissue about the kidney, without inflammation.

Dr. Little says that he remarked in his paper, to which he referred, that "implication of the cerebro-spinal and sympathetic systems formed a prominent and early feature in the disease;" but the case in question has given no evidence that that implication is meningitis, and certainly does not *prove* it.

With reference to the symptoms which Dr. Little quotes in support of his theory, I am quite sure he will not now feel himself justified in ascribing them to meningitis, since there was no post-mortem evidence whatever to bear out that view. We know that many, and the most important, of those symptoms appear in other diseases in which the implication of the nervous system is merely functional.

I may add that Dr. Belcher, in the remarks which that accurate observer makes upon the interesting case which he details in the last number of The Medical Press and Circular, refers to the very case in question, and says, "It goes far to show that there is no necessary connection between the cutaneous discolouration and cerebro-spinal arachnitis."—I am, dear sir, yours, very truly,

John Hawtrey Benson, M.B., &c.

PRELIMINARY PROFESSIONAL EDUCATION.

TO THE EDITOR OF THE MEDICAL PRESS AND CIRCULAR.

Sir,—It must be admitted, by any unbiassed thinker, that Preliminary Professional Education is still in a very unsatisfactory condition. A young man who proposes to practise the most scientific profession in existence, is admitted within its ranks without having acquired any basis of general scientific education whereon to rear his special scientific knowledge, nay, even without having shown that he possesses any capacity whatever for scientific thought, or any acquaintance with scientific methods. We do not so rear our architectural structures, but lay a broad and deep base first, and then erect the column. The field which is to bear the humblest cross is cultivated, laboured, manured, and its capabilities ascertained, before precious seed is entrusted to its bosom; but we expect the richest crop the human mind can grow to flourish in an untilled soil, nay, where, for anything we know to the contrary, there may be absolutely no soil to till. We expect that a professional man will everywhere be recognised as a gentleman, but we neglect insisting on the first qualification for the character, the possession of a well-cultivated mind.

Let any unprejudiced person say whether being able to boggle through a dozen pages of Greek, and twenty of Latin, constitutes such education as a gentleman ought to possess, or affords any test whether a man can, with credit, practise such a profession as medicine or no. Let it be remembered that, in nine cases out of ten, the general education which a man has acquired before he enters on the study of medicine, is that which must serve him all his life, for the arduous labours on which he must engage, first in the study, and then in the practice of his profession, will leave him but little time or opportunity for continuing his general education subsequently. But, on the other hand, we do not expect that the ranks of medical students will be recruited by young men from the spade or the plough, but from those who shall have devoted their boyhood to preparing their minds for the professional task they have set themselves, and, therefore, it would not be unreasonable to ask from them much higher proofs of capacity and of diligence than are in general demanded at present.

Moreover, it is certainly but fair to the young men themselves, that those of them who have not capacity to pass their professional examinations, and to earn their livelihood decently in the profession should be weeded out by the preliminary examination. That a man should have passed the preliminary, and yet fail from want of capacity at the professional examination ought to be unheard of. Much better for them if, before they should have thrown away four or five of the best years of their life in studying for a profession which they can never practice with success, they should be candidly told, "You had better seek your bread otherwise, for you have not the qualifications of mind necessary for medicine." And, I conceive, that preliminary education might be so directed as to develope these qualifications, and preliminary examination so conducted as to test them.

Let us consider what these qualifications are, and how best they may be developed. We may enumerate the following:—

1. Habits of patient through investigation.
2. Minute accuracy of observation.
3. The power of reasoning correctly from effects to causes.

For the first of these there could be no better training than that involved in an extended course of classical education, and this quite apart from its well-known effect in refining the mind, and giving a tone of elegance and culture to it.

But such a course of classical education is hardly ever sought for at the preliminary examinations, notwithstanding that it might easily have been gone through during the years presumed to have been spent at school; for, of course, it is not the classical education of the scholar that ought to be asked for, but that of the gentleman. Since, however, the colleges cannot do what the universities do in order to ensure a sufficiently extensive course of reading—namely, prescribe series after series of authors to be studied, term after term, for years, what plan might the medical boards adopt as affording a sufficient test of classical knowledge at a single examination? One very simple, but, at the same time, perfectly satisfactory, method—namely, let the examination be not in a short prescribed passage, or, at least, not in that merely, but in the language in general; not Livy, but Latin; not one of the gospels, but Greek. I do not mean to say that a man should be handed Cicero de Oratore, or a chorus of Sophocles, but let some plain easy author, say Cicero's Orations, or Cæsar or Livy; or in Greek, Herodotus or Xenophon, be put into his hands, and try what he knows of the language, making every allowance for the fact that he is supposed never to have seen the passage before, and expecting from him, as I said above, not the knowledge of the scholar, but such an acquaintance with the language as a gentleman ought to possess, and a schoolboy of fair abilities may reasonably be supposed to have acquired at the age of 17 or 18. Does this seem too much to ask? Let us recollect that it is the class of badly educated men, and those who are of inferior capacity, that overstock the professional labour-market, and so deprive their brethren of the due recognition of their professional labours by the public.

2ndly. As regards minute accuracy of observation.

Three lines of study seem to me particularly suitable for training and testing this quality in the case of medical students. One of these, being a *sine quâ non* of even decent English education, is already adopted by, I think, all the colleges, but might, perhaps, be more emphatically insisted on—namely, English spelling—a deficiency in which seems to me to point out, at once, not neglect of study, for I doubt if a man could even become a correct speller by study, but some inherent mental defect which incapacitates a man from accuracy of observation. The second subject of study under this head is geography as per map, not as per book; and this, I think, peculiarly suitable for medical students, for surely the man who is unable to carry in his mind's eye the relations of countries, rivers, and seas on a map-sheet will hardly be competent to master the far more intricate and numerous relations of human anatomy.

3rdly. Of all means of training the mind to minute and accurate observation, perhaps the study of field botany is the most direct and powerful, and inasmuch as this is a subject in-

variably prescribed for medical study, it can make but little difference to the student if it should be made a part of the preliminary rather than of the professional examination. Indigenous orders only should be prescribed, and as a test of accuracy of observation, such a subject of study would be invaluable as an addition to the preliminary examination.

Now, as to the power of reasoning correctly from effects to causes; this is, perhaps, the most important of the faculties that the medical practitioner is called upon to exercise; given phenomena—*i. e.*, signs and symptoms, he has to trace the cause—*i. e.*, to diagnose the disease. It is needless to insist that such a faculty ought to be trained and developed from the earliest years of the youth who is to be a medical man, and its existence fully and even severely tested before he is admitted to the study of a profession in which, if deficient in this faculty, he can never be anything better than a blundering quack.

And what line of study will serve best to develope this most essential faculty? None certainly can be better than that of the various physical sciences, whose very object and aim it is to enquire into the causes of phenomena; let us enumerate astronomy, geology, physical geography, meteorology, and chemical physics, the last two being almost necessary subjects of a medical man's study; finally, let us add mechanics, or if we said generally mathematical physics, so as to include hydrostatics and optics, the latter peculiarly belonging to a medical man, so much the better; for how can a man understand the mechanics of the human body, the structure of bones, the action of muscles, &c., if he is ignorant of the general principles of which we have here, these special applications? It is almost unnecessary to add that geometry and algebra are necessary preliminaries to these studies. I have suggested a pretty extensive course, but let it be remembered that a man must generally depend for life on the science he studies before he enters on his special professional pursuits, and that six or seven years of careful teaching ought to qualify him in the above subjects, say from the age of twelve or thirteen on, while a year of special metropolitan teaching would be well spent in arranging and cementing together the materials he might previously have accumulated. I do not think there is a single subject in the above course of study that could *properly* be omitted from the preliminary test examination of a man who is to practice his profession with anything like safety to the public or credit to himself. In another letter I shall, with your permission, say a few words on the subject of the age for commencing medical studies.—I am, sir, your obedient servant,

ISAAC ASHE, A.B., M.B., Eblan.

THE ADVANTAGES OF VEGETARIAN AND TEMPERANCE MEDICAL PRACTICE IN THE LONGFORD WORKHOUSE.

TO THE EDITOR OF THE MEDICAL PRESS AND CIRCULAR.

SIR,—In THE MEDICAL PRESS AND CIRCULAR of the 6th March, Mr. J. Haughton, reiterates his statement respecting the advantages of Dr. Nichols' vegetarian and temperance medical practice, in the Longford Workhouse; and, as economy is desirable, if it can be had without loss of life or of health, and particularly if proved to save either or both, I have lately examined a considerable mass of documents, to ascertain if there be real grounds for the statement that there has been a low mortality in the Longford Workhouse. The subject is one of much interest, as about 120,000 persons are annually treated for medical and surgical diseases in the Irish workhouses, in which the mortality is between 12,000 and 13,000 yearly.

The documents which I have examined are the Census Commissioners' Reports for 1851 and 1861, and the Poor-Law Commissioners' Reports from the commencement. These documents appear to supply ample materials, from which a fair comparison can be made between the results of Dr. Nichols' practice, spread over a long series of years, and the average of the practice of all the other Workhouse Medical Officers in the same years.

I shall first notice Dr. Nichols' Fever and Infirmary Report, which Mr. Haughton puts forward as proving a low mortality. It is—"Fever Hospital, remain, 0; interns, 10; externs, 41; total, 51; of whom 43 recovered, 6 died, and 2 remained." This was a mortality of 1 in 87 on the admissions, or 11·76 per cent., whilst the last published reports of the Cork-street and Hardwicke Fever Hospitals, and of the fever wards of the Meath, show a mortality of 1 in 14⅞, or 6·84 per cent., the admissions being 3439, of whom 235 died.

Dr. Nichols' Infirmary report is:—"Remain, 60; admitted interns, 491; externs, 272; total, 823. Recovered, 737; died, 45; remain, 41." This was a mortality of 1 in 17, or of 5·75 per cent., whilst that in 5228 patients admitted in a year into Steevens', the Meath, and the Whitworth, and Richmond Hospitals, was only 191, which is 1 in 27, or 3·65 per cent. It may be said that the Longford returns should rather be compared with those from other workhouses, but the Poor-Law Commissioners' Reports do not contain the necessary data to distinguish the mortality of the fever class.

The following have been carefully, and, I think, correctly, compiled from the Census Commissioners' Reports of 1851 and of 1861, and from the Poor-law Commissioners' Reports down from 1841:—

"1. From 1842 to September, 1865, the Irish Workhouses admitted 7,768,022 persons, and 483,773 died in them. This was a mortality of 6·22 per cent., or in the proportion of one to every 16 admitted. During that period, the Longford Workhouse admitted 51,791 persons, of whom 4535 died, which was a mortality of 8·77 per cent., or one in 11-two-fifths of the admissions. It appears from these returns, 1298 more died in the Longford Workhouse during that period than would have died had the rate of mortality in it been the same as the average of all the other workhouses.

"2. During the twenty years ended 1861, 48,825 persons died of fever in all the workhouses, which was one in 136 of the paupers that were admitted, or 0·73 per cent.; and 1080 died of fever in the Longford Workhouse, which was one in 48 of the number admitted, or 2·43 per cent.

"3. 174,257 persons died of zymotic diseases during these twenty years in all the workhouses, which was a mortality of one in 38-one-fourth on the number admitted, or 2·60 per cent., and concurrently 2256 died of zymotic diseases in the Longford Workhouse, which was a mortality of one in 18¼ or 5·44 per cent. These returns show that 775 more died of fever, and 1065 of all zymotic diseases in the Longford Workhouse, during these twenty years, than would have died had the mortality been only equal to the average in all the workhouses.

"4. Diarrhœa is a disease that often depends on insufficient diet, or on that which is not at the time suited to the patient. During these twenty years, one in 52 of all the admissions into the Longford Workhouse died of that disease, whilst only one in 233 died of it as the average in all the workhouses. How many that sunk under it in the Longford Workhouse would have survived under a generous meat and soup diet, it is now useless to inquire, but that for persons in diarrhœa such diet is scarcely ever omitted in public institutions or in private families is certain, and that it assists in saving life, and in the alleviation of suffering, is well-known."

These official returns show that in place of being low, as Dr. Nichols and Mr. Haughton represents, *and, perhaps believes*, the mortality has been much higher in the Longford Workhouse than the average of the other houses. It is true that, latterly, the mortality in that workhouse is comparatively less; but, at the same time, there are circumstances to make one apprehend that the fever cases in that union are not nearly as much benefited by its fever hospital as those in other Unions are, or rather that they do not so much avail themselves of it as the fever class in most unions do. This, if it be the case, in those, in this, or in any other union, is a subject of much importance, and I will endeavour to explain the grounds on which I found my belief that it is so.

1. For twenty years the annual admissions into all the workhouses averaged about one in 20 of the whole population, and those into the Longford Workhouse was an average of one in 16 of the population of that union, showing one-fifth more pauperism in the latter. Again, the annual number of fever cases admitted into all the workhouses during that period (assuming that about one in ten of that class died) was one in 237 of the population, whilst that annually admitted into the Longford Workhouse was one in 61 of the union population, And, again, zymotic diseases were annually admitted into, in the proportion of one to about 666 of the whole population, and into the Longford Workhouse as one in 282. These returns not only mark a high comparative degree of pauperism in the Longford Union, but also a high comparative mortality extending over a long period.

2. For several years one in 12½ of the population of the Longford Union has been received into the workhouses, whilst only one in 18 of the population of all the Leinster Unions has been admitted. This shows the pauperism of the Longford Union to be one-third higher than that of Leinster yet.

3. In the ten years ended 1865, though 35,384 fever cases, or one in 42-one-fifth, of the Leinster population were

received into the workhouses, only 306, or one in 107 of the population of the Longford Union, were admitted. Now, as the pauperism of that union was much higher than the average of that of the Leinster unions, it is reasonable and logical to assume that fever prevailed there at least in the same ratio as in them, and, assuming that to have been the case, there would have been 846 fever cases to be admitted. From this, it would seem that 540, such as would have availed themselves of the advantages of the fever hospitals of the Leinster workhouses, did not seek that of the Longford Fever Hospital. (And let me observe, that if these 540 were admitted, the mortality would be much higher.)

If that be the case, there must be some cause or causes for it. The class that supplies paupers to workhouses, and patients to fever hospitals, know as well as the wealthy that, in the progress of fevers, some spirituous stimulant, as well as some light soup, is much used, and much relied on, and they also know that a light meat diet considerably helps convalescence.

But, as they know that neither is to be had in the Longford Workhouse, is it not likely that many fever cases refuse to go there, or are prevented by their friends from going, as those (supposed) advantages are not to be had in it?

If, as these data appear to show, there has been higher mortality in the Longford than in the other workhouses, and if any considerable number of the fit objects for hospital relief be unwilling to go into the hospital there, no saving as to the quantity of the articles of meat and fermented liquors that would be really required can compensate for the injury that must arise. The cost for spirituous stimuli in the Dublin fever hospitals does not exceed an average of about 18d. per patient; it is often less; to dispense with it, or with some animal food in hospitals appears to be an experiment that should only be *permitted* on better proof than Dr. Nichols and Mr. Haughton have offered. If the medical attendants of Fever Hospitals in Dublin and elsewhere, find it necessary to watch anxiously the effect of spirituous stimulants on these fever patients, and that they have grown grey in that practice, it is not to be supposed that they adhere to it without the assurance that they are doing right. A member of the profession who entirely discards these particular means of curing the sick, undertakes serious responsibility; the colleges have objected to homœopathic practitioners, and public departments have done the same. In my mind, Dr. Nichols' system is, at least, as objectionable and far more likely to be injurious.

Should these data and observations have any effect in preventing the Longford practice from being followed elsewhere by Boards of Guardians, the labour I have had in collecting the materials, and it was not small, will be recompensed.—I am, yours, &c., DENIS PHELAN.

P.S.—"The average cost per head for all that were relieved in all the workhouses up to 1850, was 40s. 9d.—in Longford it was 36s. 8d.; from thence to 1865, included, the average in all the workhouses was 34s. 8d.—in Longford 39s. This shows that since Dr. Nichols got rid of meat and fermented liquors, the cost per head for each person that got relief in the Longford workhouse was 4s. 4d. more than in the others. In this calculation, every four cases on out-door relief, are considered as one on in-door. I give this calculation to show that Dr. Nichols' treatment does not make the cost less than the general averages, but that it rather increases it."—D. P.

LODGMENT OF A COIN IN THE ŒSOPHAGUS. DISLODGED BY MANIPULATION.

TO THE EDITOR OF THE MEDICAL PRESS AND CIRCULAR.

SIR—J. C., æt. 32 years, came to me on the 23rd inst., in a state of great alarm and excitement, and informed me that while amusing some of his children, by pretending to swallow a halfpenny, it had "accidently gone down his throat." He complained of a sense of uneasiness at the upper part of the sterum, and a slight feeling of suffocation. I examined the pharynx without being able to discover any foreign substance, but on examining the neck externally, I detected a projection in the œsophagus, about two and a-half inches from the termination of the pharynx. The projection had a smooth, round feeling to the touch, and was evidently the edge of the coin as it lay in an oblique direction across the œsophagus; on pressing this projection pain was complained of.

I gave the patient a mouthful of soft bread, which, however, had not the effect of dislodging the coin, as the projection still remained, and the patient expressed a feeling as if the bread had stuck in the œsophagus, and had not passed down into the stomach. Before resorting to the use of the probang, I thought I would try the effect of manipulation, with a view of dislodging the coin from its position, and so give it the chance of passing down into the stomach. I accordingly endeavoured, by gentle manipulations, to push the edge of the coin upwards, and thus remove it from lying flat, or partially so, across the gullet, and after about five minutes exertion the projection suddenly disappeared, and the patient expressed himself considerably relieved. I now gave him a mouthful of water which he swallowed, and immediately afterwards a mouthful of soft bread, which he likewise swallowed, though with some pain. Considering from the above circumstances that the coin had passed down into the stomach, I directed the patient to take a purgative at bed-time, and to carefully examine the fæces in the morning. My directions were attended to, and the patient discovered, in the fæces, the coin which had been the cause of all his alarm. JOHN GEO. THORNLEY, M.D.

DOMICILIARY SANITARY INSPECTION.

TO THE EDITOR OF THE MEDICAL PRESS AND CIRCULAR.

SIR,—Observing the paragraph on the above subject in your last number, I shall be obliged if you will allow me to make one or two observations, by way of explanation. The idea that I had in view, was for private householders to make their own selection in the appointment of a Sanitary Inspector, and I therefore referred to the plan as "voluntary." Under such an arrangement no general fund would be necessary for the purpose, as each inspector would be engaged, and paid by the family making the appointment; a very economical arrangement it would undoubtedly prove, in the prevention of individual sickness, and consequently the preservation of Public Health. This last consideration ought to weigh with the authorities, and I believe it would be a most important step in the interests of the public, if the General Board of Health would make it compulsory upon local boards to appoint female sanitary inspectors, at a fixed salary, whose duty it would be to make a house to house visitation at stated periods, the expenses to be defrayed out of the general purpose rate. In order to meet the objections of individuals to such official inspection of their premises, notice might be given of the plan, and exemption could be made in cases where such objection might exist. I think the difficulties which are likely to be raised in the matter may be disposed of in the way proposed. I need only say, in reply to another observation which you make in the paragraph alluded to, that a lady, whether trained or untrained in sanitary matters, is to a great extent excluded from some corner of her own establishment, and those perhaps the most needing sanitary inspection and rectification.—I am, sir, yours, &c. M. A. B.

OPERATION FOR STRANGULATED DIRECT INGUINAL HERNIA.

TO THE EDITOR OF THE MEDICAL PRESS AND CIRCULAR.

SIR,—I was called on the 22nd March to see Mrs. M., aged 60, suffering from strangulated direct inguinal hernia. Dr. Fleming of this town had been in attendance; he tried to reduce it, but owing to the length of time it had been down—one year, without ever being returned, and adhesions formed—as a matter of course he could not reduce it. The hernia was the size of a hen egg. I performed the operation, assisted by Dr. Fleming, and my son, Dr. Albert Lane, kept her under the influence of chloroform. I had some little difficulty, on account of the adhesions, but otherwise none. The patient did not lose half an ounce of blood during the operation. On the fourth day she had an attack of diarrhœa, a little chalk mixture soon set it to rights. On the fifth day she was up and as busy as a bee, and had not a minutes pain or ill health since.—I am, sir, yours, &c. WILLIAM LANE, M.D.

Newtownlimavady, May 2nd, 1867.

ON THE PURIFICATION OF WATER: A NEW METHOD.

TO THE EDITOR OF THE MEDICAL PRESS AND CIRCULAR.

SIR,—With reference to the article in your paper of 1st inst., "On the Purification of Water, a New Method," I regret you have been misinformed as to the Proprietorship of the Invention therein alluded to, the same being solely vested in the London and General Water Purifying Company Limited, and the testimonial therein referred to from Dr. Letheby was given

by that gentleman to this Company, and to no one else, as you will observe by enclosed copy of same.

The apparatus is on view at our Patent Cistern Filter Depôt, and I may further mention that the Filtering Apparatus was the *sole* invention of a Mr. F. H. Danchell, and *not* of Mr. T. W. Tobin,—I remain, dear sir, your obedient servant,

R. RUDING.

Medical News.

UNIVERSITY OF CAMBRIDGE, MAY 1ST—PROFESSORIAL CERTIFICATE EXAMINATION, APRIL, 1867.—Regius Professor of Laws.—H. Rowan, Trinity College. J. T. Abdy and T. Waraker, Examiners. Anatomy—W. Roper, St. John's College. G. M. Humphry and Charles Lestourgeon, Examiners. The examinations for Medical and Surgical Degrees in the present term will commence on Monday, the 3rd of June, at nine A.M., in the Anatomical Schools. Candidates intending to offer themselves for examination are required to signify the same to the Regius Professor of Physic on or before the 20th of May, and to send at the same time their certificates. A fee of three guineas is paid to the Professor by each candidate when his name is sent in for his first examination for the M.B. degree. The final examination for the degree of M.B. under the old regulations will begin on the 3rd of June, as well as the first examination for the degree of M.B. under the new regulations, and the examination for the degree of Master in Surgery. The second examination for the M.B. degree under the new regulations will begin on Monday, the 10th of June, at nine A.M.

ROYAL COLLEGE OF SURGEONS OF ENGLAND.—The following gentlemen passed their primary examinations in anatomy and physiology at a meeting of the Court of Examiners on the 30th ult., and when eligible will be admitted to the pass examination:—

J. Ryall Rouch, W. Day Lovell, Robert Alcock, W. Howell Lloyd, H. Mason Jay, R. Garton Coombe, L. Fyson Cogan, Herbert Boyd, C. D. H. Drury, E. H. Downing, James Bilham, William Claridge, Bernard Duke, C. Hinds Lawrence, John T. Darby, A. E. B. Love, Charles Wood, J. Spottiswoode Cameron, W. R. Cheyne, J. E. Ward, Reginald Taylor, John Stride, E. Roger Rowland, T. Llewellyn Browne, Charles J. Oldham, E. Josephus Green, William Milligan, Owen Roberts, A. Shuter Duncan, John H. Morton, T. Lambert Lack, and H. Ensworth Jackson.

The following were examined on the 1st inst.:—

Messrs. Robert E. Grigson, J. Ashburton Thomson, John Hasard, Frederick Wicks, Edward Greaves, S. Stainton Brown, and E. Lorton Collins, students of Guy's Hospital; E. C. A. Esnouf, Edwin Rickards, and William Hardman, of University College; David W. Morris, John Adams, and Armand Leslie of the Middlesex Hospital; George Birt and W. Blakley Cochrane, of the Birmingham School; H. Schofield Baldwin and W. Bowen Davies, of St. Bartholomew's Hospital; Owen Williams and J. Gerson da Cunha, of St. Mary's Hospital; Charles J. Rix and T. Carleton Railton, of Manchester; W. Augustus Hewett, of King's College; Charles H. Wainwright, of Leeds; J. Waters Harrison, of Sheffield; and William A. P'Anson, of Newcastle.

The following passed the same examinations on the 2nd inst.:—

Messrs. C. Wait Smith, Ernest G. Archer, Albert F. Field, and Barnfield Dayman, students of St. Bartholomew's Hospital; W. Horne Bailes, Adam J. Whitefoorde, J. Lawrence Bullock, and L. Victor Dubois, of University College; A. Milwood Sculthorpe, J. Lloyd Roberts, Thomas Standish, and William Morris, of the Birmingham School; James Dunne and H. Widenham Maunsel, of Dublin; R. Hodgens Lloyd and Frederick Morgan, of the Westminster Hospital; John Porter and Samuel Buckley, of the Manchester School; W. L'Heureux Blenkarne and J. Dungey Roberts, of Guy's Hospital; William Hughes and Robert Griffiths, of Glasgow; J. Herbert Wade, of St. George's Hospital; Alfred Kelly, of King's College; W. Derrickson Beard, of St. Mary's Hospital; W. J. C. Ward, of Edinburgh; W. T. G. Leapinwell, of the London Hospital; and W. Poulton Lee, of the Middlesex Hospital. It is stated that 23 candidates out of the 108 who offered themselves for this primary examination failed to acquit themselves to the satisfaction of the Court, and were consequently referred to their anatomical studies for a period of three months.

APOTHECARIES' HALL OF LONDON.—The following gentlemen passed their examination in the Science and Practice of Medicine, and received certificates to practice, on the 25th ult.:—

Daniel King, Stratton, Cornwall; Henry Child Buckley, Llanelly, Carmarthen; Arthur Eisdell Fluder, Lymington, Hants; Robert King, Alfred-place, Bedford-square; Hugh James Lloyd, Dolgelly, North Wales; William Joseph Marsh, Nottingham; William James Todd, King's College Hospital.

The following gentleman also on the same day passed his first examination:—

William Croudson Barnish, Manchester Hospital.

At the preliminary examination in Arts held at the Hall on the 26th and 27th ult., 69 candidates presented themselves, of whom 22 were rejected, and the following 47 passed, and received certificates of proficiency in General Education:—

C. E. Adams, E. L. Archer, E. O. Bark, W. T. Benham, R. Bower, J. P. Cartwright, G. C. Cheyne, J. Couldrey, Cecil Drake, R. W. Edgington, E. W. Freeman, M. C. Hallowes, W. Hanson, P. T. G. Head, W. C. Head, A. M. Hynes, C. G. Jones, Alfred Kay, J. N. Kiddle, J. C. Kirby, W. T. Law, J. A. T. Lang, G. T. Langridge, H. A. Lawton, John Litt, W. L. Mayer, C. J. C. Mitchell, E. W. Moore, P. W. G. Nunn, J. H. Osborne, E. J. Parrott, G. R. Priddle, A. C. Raine, O. R. Richmond, P. J. Robey, Walter Shaw, John Spear, F. Stedman, E. F. Thomas, W. Tomlinson, E. B. Trotter, J. S. Trousdale, H. Waldo, A. J. M. Walker (certificate of special proficiency), W. J. Walsham, J. F. Weatherhead, and Richard Williams.

UNIVERSITY OF ST. ANDREW'S.—Pass List.—The

DEGREE OF M.D.

Thomas J. Blake, L.S.A.Lond., L.R.C.P.Edin.; William H. Brace, M.R.C.P.Edin., F.R.C.S.Edin.; William Elliott, L.F.P. and S.Glasg., L.S.A.Lond.; John R. Fothergill, L.R.C.S.Edin.; George Aug. Jeffery, M.R.C.S.Eng, L.S.A.Lond.; Alexander Johnston, M.R.C.S.Eng., L.S.A.Lond.; James Lilburne, L. and F.R.C.S.E., Surg. R.N.; Thomas Lloyd, F.R.C.S.E., L.S.A.Lond.; John Denis Macdonald, M.R.C.S.Eng., Staff-Surg. R.N.; Edward Richardson, M.R.C.S.Eng., L.S.A.Lond.

UNIVERSITY OF ABERDEEN.—Pass List.—The

DEGREE OF M.D.

Edwin Burrell, London; James D. Mackay, Coghill, Edinburgh; Peter Cullen, Bengal; Henry Eales, London; Henry Wm. Williams, Northampton.

PROMOTED TO THE DEGREE OF M.D.

George Henry Anderson, Middlesborough, York; Stewartson Clark, Banff; Alfred Swaine Lethbridge, Axminster, Devon; George Mackie, Insch; George Mair, Turriff; Douglas Moir, Manchester; John Murray, Aberdeen; George Frederick Wales, Belfast; Charles James Wills, Brighton, James Yates, Oldham.

THE DEGREE OF M.B.

Alfred Henry Authonisz; Henry Child Buckley, Llanelly, Carmarthenshire; James Cameron, Laurencekirk; James Charles Gordon Carmichael, Maryculter; James Allan Coutts, Kincardine O'Neil; John Craigie, Doddington, Kent; George Henry Roque Dabbs, Newport, Isle of Wight; Alexander George Duncan, New Pitsligo, Aberdeenshire; James Farquhar, Buckie, Banffshire; Robert Grant, Tomintoul, Banffshire; John Thomas Hughes, London; Frederick William Jackson, Broadstairs; Sydney Johnson, Laxton, Nottinghamshire; Hugh Johnstone, Savoch, Aberdeenshire; Timothy Lewis, Narberth, South Wales; Charles Maclean, Kiltearn, Ross-shire; Alexander Hunter Mair, Savoch of Deer; John Sturrock Mitchell, Letham, Forfar; Alexander Reid, Gartly; Alexander Le Rossignol, Jersey; Arthur Stephen, St. Cyrus, Kincardineshire; Henry Shinglewood Taylor, Alton, Hants; Wentworth Rayner Tindale, Peckham Rye.

THE DEGREE OF C.M.

Alfred Henry Authonisz, Henry Child Buckley, Edwin Burrell, James Cameron, James Charles G. Carmichael, James D. Mackay Coghill, James Allan Coutts, John Craigie, Peter Cullen, George Henry R. Dabbs, Alexander G. Duncan, Henry Eales, James Farquhar, Robert Grant, Sydney Johnson, Hugh Johnstone, Timothy Lewis, Charles Maclean, Alexander Hunter Mair, John S. Mitchell, Alexander Reid, Augustin Le Rossignol, Arthur Stephen, Henry S. Taylor, Wentworth R. Tindale, Henry W. Williams.

Of the above-mentioned, the following passed with Highest Academical Honours:—

James Cameron, James Allan Coutts, Hugh Johnstone, Arthur Stephen.

And the following with Academical Honours:—

James Charles G. Carmichael, Timothy Lewis.

The following were declared to have passed part of their examinations:—

Charles Adam, George Ed. D'Arcy, Adams, Robert Reid Alexander, John Batten, James T. Crowden, Ed. L. Crowther, Frederick A. Davson, Thos. Birch Dyer, Alexander Forbes, Henry Grant, John S. Gunn, George W. Hutchison, James Ironside, Henry Kirwan King, Alexander Laurence, Alexander M'Arthur, Robert Macpherson, George William Mousley, Patrick Nicol, James Allan Philip, Ed. Payne Philpots, Richard James Quinnell, John Robb, John Roberts, David Shirres, John Shives, George Alexander Simpson, David Sinclair, Joseph H. Smith, Francis W. Smith, Patrick B. Smith, Alfred C. Taylor, John L. Thomas, Hercules S. Traill, David Tulloch, Albert Williams, Richmond C. Willock, Alexander G. Wood, and Ed. R. Woodford.

LIST OF ENTRIES IN THE REGISTER OF THE BRANCH MEDICAL COUNCIL, (IRELAND).

FOR THE MONTH OF APRIL, 1867.

Hurley, John James, Tralee, County Kerry, L.R.C.S.I. 1866; L.M.K.Q.C.P.I. 1866.

Sloss, Joseph, Surg. R.N., Portadown, County Armagh, M.D.Univ. Glas. 1846; L.R.C.S.Edin. 1847.

Adrien, Edward William, Oldtown, County Dublin, M.R.C.S.Eng. 1865; L.K.Q.C.P.I. 1866.

Stephens, William, Ballyshannon, County Donegal, M.D.,Q.U.I. 1866; L.R.C.S.I. 1865.

Thornton, Daniel, Hardwicke-street, L.R.C.S.I. 1865.

McClement, Frederick, Dundrum, County Down, M.D.Q.U.I. 1866; L.R.C.S.Edin. 1867.

Daniel, Benjamin Adams, Ball's-bridge Terrace, L.R.C.S.I. 1867.

Hatchell, Joseph Henry, Hume-street, L.R.C.S.I. 1866; L.K.Q.C.P.I. 1867.

Hatchell, George W., Hume-street, L.R.C.S.I. 1866; L., 1867, and L.M. 1867, K.Q.C.P.I.

Reilly, Maxwell Francis, Holles-street, M.R.C.S.Eng. 1867.

SIR GEORGE DUNCAN GIBB, BART.—Under the heading "A New Medical Baronet," the British Medical Journal announces that Dr. G. Duncan Gibb has succeeded to the Baronetcy of Gibb of Falkland, Fife. This instance cannot be properly held to be one of a Medical Baronetcy, inasmuch as it is an honour simply acquired by inheritance. The Baronet in the present case is the well-known author of the work on Diseases of the Throat and Wind-pipe, as seen with the Laryngoscope; and he is one of the Assistant Physicians of the Westminster Hospital.

THE BRITISH PHARMACOPŒIA.—We have to announce the appearance of the revised edition of the British Pharmacopœia. It has been prepared by Professor Redwood of the Pharmaceutial Society, and Mr. Warrington of the Apothecaries' Hall, London, under the direction of a Committee of the Council, consisting of the following members:—Dr. Burrows, Dr. Apjohn, Dr. Cristison, Dr. Sharpey, and the Honorary Secretary, Dr. Quain. It is a volume of very convenient size, post 8vo, is printed on excellent paper, in very good type, and in respect of size is a decided improvement on the edition of 1864, which was published in 8vo, and 32mo. We are obliged to defer, till next week, any commentary on the additions, alterations, or omissions in the present edition, merely premising that the high character of those concerned in its production, demands that whatever criticism we may feel bound to offer, should be strictly impartial, and should not degenerate into a mere lavish of praise, as is often the case in reviews of works on Medicine.

NOTICES TO CORRESPONDENTS.

"SEMI-EDITORIAL NEWSPAPER PUFFERY."

We publish the following note as a corrollary to our observations on the puffing of Professors Tanner and Corbett, of Cork:—

"TO THE EDITOR OF THE MEDICAL PRESS AND CIRCULAR.

"SIR—I request that you will remove my name from the List of Subscribers to THE MEDICAL PRESS AND CIRCULAR.—I remain, yours,

"W. T. TANNER."

A correspondent calls our attention to the very gross insolence of the porter at the Army Medical Office in Whitehall. It appears from the statement of our correspondent, who is quite incapable of a misrepresentation, that the insulting rudeness of this person has been repeated more than once. The simple course to be taken to prevent insolence from such understrappers is to lay their conduct before their superiors, who would, we are certain, visit it with condign punishment.

Mr. Henry Smith, 33, *Norfolk-street, Strand*, has drawn our attention to the article on "The Purification of Water," which appeared in our columns last week. Mr. Smith states that the apparatus therein mentioned is the property of his clients, the Directors of the London General Water Purifying Company, as transferees of the patent of Mr. Danchell, and that it can be seen in operation daily at the premises of the Company, 157, Strand.

Mr. Parker, Bath.—Mr. Paget having promised to consider the merits of your splints, we think it courteous to so eminent an authority to postpone any discussion.

Dr. Croft, St. John's Wood.—The law of libel is so framed, that even the publication of facts, where any individual is personally concerned, can be made actionable. There are, as you observe, many "official puppies" in existence, to whom the administration of leather would probably not be a new operation. The publication of their names, however, might have a very different effect, and lead to expensive litigation. We should, in the present case, advise you to lay your complaint before the chief of the department.

Inquirer.—The statutory lectures recently delivered at the Royal College of Physicians, and of which we gave an abstract under the titles of the Croonian, the Gulstonian, and the Lumleian, derive their names from the founders Drs. Croone, Gulston, and Lumley. They are delivered annually with certain restrictions.

ERRATUM.

In Dr. Little's letter on Dr. Benson's case, read "presence" instead of "absence" of meningeal adhesions, &c.

MEDICAL APPOINTMENTS.

ALLEN, J., M.R.C.S.E., has been appointed Medical Officer and Public Vaccinator for the Ripley District of the Belper Union, Derbyshire, vice W. H. Fletcher, L.S.A.L., deceased.

BATT, C. D., M.R.C.S.E., has been appointed Assistant House-Surgeon to the Sheffield General Infirmary, vice A. C. Turner, L.R.C.P., resigned.

BRIDGMAN, I. T., M.R.C.S.E., has been appointed Medical Officer for the Berkeley District of the Thornbury Union, Gloucestershire.

CHAMBERS, Dr., has been appointed Medical Officer to the Workhouse of the Bailieborough Union, Co. Cavan, vice J. Levey, M.D., deceased.

CLARKE, T., M.R.C.S.E., has been appointed Medical Officer for the Poulton District of the Fylde Union, Lancashire, vice R. H. Bowness, M.D., resigned.

CRANKE, R., L.R.C.P.Ed., has been appointed Medical Officer for the Ulverstone District and Workhouse of the Ulverstone Union, Lancashire, vice H. Seatle, M.R.C.S.E., deceased.

ELLIOTT, J. R., L.K.Q.C.P.I., has been appointed Medical Officer for the 11th District of the Barnstaple Union, Devon, vice J. Clarke, M.R.C.S.E., resigned.

LEAF, W., M.R.C.S.E., has been appointed one of the Surgeons to the St. Marylebone General Dispensary, vice J. Brighouse, M.R.C.S.E., resigned.

LEVICK, G., M.R.C.S.E., has been appointed Hon. Surgeon to the 5th Essex Rifle Volunteer Corps. Mr. Levick has also been appointed Divisional Surgeon to the Plaistow Station of the K Police, vice E. J. Morriss, L.R.C.S.I., deceased.

MEGGET, A., M.R.C.S.E., has been appointed Medical Officer to the Scarborough Union District, vice W. H. S. Wilson, deceased.

MONKS, E. H., M.R.C.S.E., has been appointed Medical Officer for the Ince District of the Wigan Union, Lancashire.

NEWMAN, A., M.B., has been appointed Medical Officer for the Townstal District of the Totnes Union

RABLAH, J. J., L.F.P. & S. Glas., M.R.C.S.E., has been appointed Medical Officer to the Scarborough Workhouse, vice W. H. S. Wilson, L.S.A., deceased.

SIMMONS, B., M.R.C.S.E., has been appointed Medical Officer and Public Vaccinator for the Charfield and Totworth Districts of the Thornbury Union, Gloucestershire, vice Hicks, resigned.

STEVENSON, T., M.D., M.R.C.P., has been appointed an Examiner in Forensic Medicine in the University of London.

WALLER, J., M.R.C.S.E., has been appointed Resident Medical Officer to the Western General Dispensary, Marylebone-road, vice Richard L. Shone, M.R.C.S.E., appointed Resident Medical Officer to the Kensington Dispensary.

WELCH, T. D., M.A., M.D., has been appointed Physician to the Kent and Canterbury Hospital.

WRIGHT, R. T., M.D., has been appointed Resident Physician to the Queen's Hospital, Birmingham, vice T. A. Wood, M.D., resigned.

BOOKS, &c., RECEIVED.

The Ultimate Structure of Voluntary Muscular Tissue. By M. L. Mitra.

The Glasgow Medical Journal.

The Pharmaceutical Journal.

On the Repressive Measures Adopted in Paris, compared with the Uncontrolled Prostitution of London and New York. By A. Vintras, M.D.

Hardwick's Science Gossip for May.

The Homœopathic Review.

The Waste of Infant Life. By J. Brendon Curgenven, M.R.C.S.

The Journal of Anatomy and Physiology. No II., for May. London: Macmillan and Co.

The Ophthalmic Review. No. II. Edited by J. Zachariah Laurence.

The Poisons of the Spreading Diseases. By Benjamin W. Richardson, M.A., M.D.

Practical Dissections. Second Edition. By Richard M. Hodges, M.D.

Obstetrics: the Science and the Art. By Charles D. Meigs, M.D. Fifth Edition.

The New York Medical Journal. No. 24, vol. iv.

The American Journal of the Medical Sciences. No. CVI.

On Vital Force: its Pulmonic Origin. By T. G. Hake, M.D., F.C.S.

The Irritable Bladder. Second Edition. By T. D. Grant, F.R.C.S.

Births, Marriages, and Deaths.

Announcements are inserted without charge, and must in all cases be authenticated with the signature of the sender.

BIRTHS.

JERRARD.—On the 4th ult., at Honiton, Devon, the wife of Dr. Jerrard, of a son.

WALKER.—On the 10th ult., at Wooler, Northumberland, the wife of R. Walker, M.D., of a son prematurely.

HISLOP.—On the 16th ult., at St. George's-road, Glasgow, the wife of J. Hislop, M.D., of a son.

PRINGLE.—On the 17th ult., at Rutland-square, Edinburgh, the wife of Dr. Pringle, late of the Madras Service, of a daughter.

CULLEN.—On the 19th ult., at Rowanlea, Alexandria, Dumbartonshire, the wife of J. F. Cullen, M.D., of a daughter.

BUCHANAN.—On the 21st ult., the wife of George Buchanan, M.D., of Harley-street, of a daughter.

LLOYD.—On the 29th ult., at Grange-road, Bermondsey, the wife of Albert Lloyd, M.R.C.S., L.S.A., of a daughter.

DAY.—On the 29th ult., at Manchester-square, the wife of W. H. Day, M.D., of a son, who survived his birth a few hours.

MARRIAGES.

LEWIS, PRICE.—On the 24th ult., at St. Woolas Church, Newport, David Lewis, Surgeon, youngest son of David Lewis, Esq., R.N., of Newcastle-in-Emlyn, to Susan, eldest daughter of Capt. James Price, R.N.R., of Newport, Monmouthshire.

WADD, BURDON.—On the 30th ult., at the Church of St. Mary-the-Virgin, Kilburn, Frederick John Wadd, Surgeon, of Beaconsfield, Bucks, to Maria Louisa, daughter of Thomas Burdon, Esq., of Kilburn.

HUNTER, COOPER.—On the 30th ult., at the Church of St. Thomas, Portman-square, Wm. Fritt Hunter, Esq., youngest son of the late George Yeates Hunter, M.D., J.P., of Margate, to Jane, eldest daughter of H. Cooper, Esq.—No Cards.

COCKS, JONES.—On the 30th ult., at Goodrich, Herefordshire, Cary Cocks, M.D., of Ross, son of the late W. Cocks, Esq., and grandson of the late Rev. Thomas Underwood, Rector of Ross, and Canon of Hereford Cathedral, to Mary Jane, second daughter of the late Walter Jones, Esq., of Sugwas Court, in the same County.—No Cards.

DEATHS.

GATEHOUSE.—On the 27th ult., at Bowlish Cottage, Shepton Mallet, Charles Gatehouse, M.R.C.S., L.S.A., aged 72.

SKEVINGTON.—On the 26th ult., John Skevington, F.R.C.S.E., of Ashbourne, Derbyshire, aged 60.

WILSON.—On the 8th ult., W. H. S. Wilson, L.S.A., of Scarborough.

Original Communications.

ON DREAMING, CONSIDERED ESPECIALLY IN RELATION TO INSANITY.

By THOMAS MORE MADDEN, M.R.I.A.,

LICENTIATE OF THE KING AND QUEEN'S COLLEGE OF PHYSICIANS IN IRELAND, MEMBER OF THE ROYAL COLLEGE OF SURGEONS OF ENGLAND, AUTHOR OF AN ESSAY "ON INSANITY AND THE CRIMINAL RESPONSIBILITY OF THE INSANE," "ON CHANGE OF CLIMATE, A GUIDE FOR TRAVELLERS IN PURSUIT OF HEALTH;" "THE SPAS OF GERMANY, FRANCE, AND ITALY," &c., &c., &c.

(Continued from page 438.)

XI. THE PATHOLOGICAL INDICATIONS FURNISHED BY DREAMS *(continued)*.

SEVERE fevers are also very frequently preceded for days by "*Paroniria*," or morbid dreaming, which is probably produced by the direct action of the fever-poison on the highly sentient brain-structure before it occasions its constitutional symptoms. The exanthemata are very commonly presaged by fearful dreams. Rhazes, the Arabian physician of the ninth century, notes, among the signs of approaching small-pox, "terrors in sleep." He regarded this prognostic as of considerable importance, and says, "When, therefore, you see these symptoms, or some of the worst of them (such as the pain of the back, and the *terrors in sleep*, with the continued fever), then you may be assured that the eruption of one or other of these diseases is nigh at hand."(1) Intermittent fever is often announced several days before any of the recognised symptoms set in, by persistent dreams of terrifying character. I have experienced this in my own person, and heard it confirmed by other sufferers on the African coast. The following case of morbid dreaming, ushering in yellow fever, I subjoin in the words of the gentleman to whom it occurred, himself a medical man, holding a high official position on the Gold Coast when it occurred:—

"In the early part of 1840, I was an inmate of Cape Coast Castle, and as some repairs were then being made in the Castle, the room assigned to me was that in which the ill-fated L. E. L. (Mrs. Maclean), the wife of the Governor of Cape Coast had been found dead, poisoned by prussic acid, not very long previously. I had known her in London, and had been intimately acquainted with her history, and much interested in it. Her body had been found on the floor, near the door, and in front of a window. After a fatiguing excursion to some of the adjoining British settlements on the coast, having retired to rest, I awoke disturbed by a dream of a very vivid character, in which I imagined that I saw the dead body of the lady who had died in that chamber lying on the floor before me. On awaking, the image of the corpse kept possession of my imagination. The moon was shining brightly into the part of the room where the body had been found, and there it seemed to me, on awaking, it lay pale and lifeless as it appeared to me in my dream.

"After some minutes, I started up, determined to approach the spot where the body seemed to be. I did so, not without terror, and walking over the very spot on which the moon was shining, the fact all at once became evident and obvious that no body was there—that I must have been dreaming of one. I returned to bed, and had not long fallen asleep, when the same vivid dream recurred—the same waking disturbance occurring while awake. As long as I lay gazing on the floor I could not dispossess my mind of that appalling vision, but when I started up and stood erect, it vanished at the first glance.

"Again I returned to bed, dozed, dreamt again of poor L. L. E.'s lamentable end, and of her remains on the same spot; again awaked, and arose with the same strange results.

"There was no more disturbance that night of which, at least, I was conscious, but, when morning came, fever was on me in unmistakeable force, in its worst form, and partial delirium set in the same night. I was reduced to the last extremity about the third or fourth night of my illness, when a conviction seized on my mind that it was absolutely essential to my life that I should not pass another night in Cape Coast Castle. I caused the negro servant I had fortunately brought out with me from England, to have a litter prepared for me at dawn, and, stretched on this litter, hardly able to lift hand or foot, I was carried out of my bed by four native soldiers, and was conveyed to the house of a merchant and countryman of mine, to whose care and kindness I owe my life. So much for a visionary precursor of fever on the West Coast of Africa."

In neuralgia, disturbed dreaming is occasionally a prominent symptom. In one obscure case I was led to make what I believe to be a true diagnosis from the indications furnished by the patient's dreams. The individual in question is a man aged about 45, of an anæmic habit, confined by a sedentary occupation, who, for many years, had suffered from hemicrania, which latterly has become more intense and the intervals shorter. A couple of days before the attack, his sleep becomes broken by unpleasant dreams, and when the paroxysm has attained its height, he invariably dreams that he is the helpless victim of a persecutor, who finishes a series of torments by driving a stake through his skull, after which he becomes insensible. During his recovery from each attack, he states that his dreams are of a most agreeable character, though so vague that he cannot give any account of them. The frequent repetition of this dream leads me to conclude that there is some osseous growth within the cranium, and that the vascular distention accompanying the neuralgic attack, occasions pressure upon this, giving rise to the sensation I have referred to, while the subsequent feeling of comfort results from that pressure being removed.

Cardiac disease and hydro-thorax, which occasionally interferes with the functions of the circulatory apparatus, are often attended with disturbed dreaming. "Persons," says Dr. Copeland, "labouring under disease of the substance or valves of the heart, are subject not only to imperfect or disturbed sleep, but also to fearful dreams; and if they fall asleep in an uneasy position, or on the left side, in some cases they generally waken up soon from a fearful dream, as falling down from a precipice, drowning, &c.; their dreams being more pleasant when the position is more comfortable."(1) "Paroniria" is also very frequently occasioned by disease or irritation of some remote part or organ of the body; and, in many instances, morbid dreaming may be directly traced to the influence of some article of diet. Thus, for example, I am acquainted with a lady who, if she takes tea in the evening, is not kept awake by it as some persons are, but when she falls asleep, is thrown by it into a state of horrible dreaming, from which she always awakes up suddenly, under the illusion that a number of shadowy figures are sitting crouched up on every chair in her room. She is quite sensible at the time of its being an hallucination, but still cannot banish this idea from her mind. I need not make any remarks on the analogy which this kind of dreaming presents to the symptoms of incipient insanity, although, in reality, very different from that state, as I already have spoken on this point in my comments on another case of this kind which I described.

XII. THE TREATMENT OF "PARONIRIA," OR MORBID DREAMING.

Cases occasionally occur in medical practice in which the patient complains of nothing whatever but morbid dreaming, and its effects, and in which this one complaint, trivial as it might at first appear, is sufficient to destroy either his mental or bodily health, or both.

Some years ago, I had a patient under my care, whose principle complaint was "paroniria," as morbid dreaming has been termed by some writers, and a most formidable disease it was. This individual, who was a person of a highly nervous temperament, had been suffering for some

(1) Rhazes "On the Small-pox and Measles." Translated from the Arabian by Dr. Greenhill. P. 34. London, 1848.

(1) Dr. Copeland: "Dictionary of Practical Medicine." Art. Sleep; vol. iii., part ii., p. 805. London, 1858.

time from severe dysentery, the result of long residence in a tropical climate, and when he came to me was greatly weakened by this malady. The dysentery gradually subsided under treatment, and then I lost sight of him for several months, at the expiration of which he returned, looking worse than ever. He was miserably thin, and so nervous that the sudden closing of the door alarmed him. His memory was effected to a great degree, and he was afraid to speak to his familiar acquaintance, having lost all recollection of their names. There had been no return of the dysentery; he suffered from no pain, but had lost his appetite, and was extremely weak. Having told me all this in reply to my questions, he added—"I am half ashamed to tell you how much I dread night and bed hour, as I have such horrible dreams that for several successive nights I have not gone to bed at all, but slept a little in a chair." In short, this was a well-marked case of "paroniria," which, I may add, was finally cured by a combination of moral and physical remedies, with the necessary medicines. But I have very little doubt that, had this symptom been neglected much longer, the case would suddenly and speedily have passed from the state of *premonitory* into that of *confirmed* insanity. In these cases the hallucinations, as pointed out by Dr. Forbes Winslow, appear to be most vivid at night. "When the patient is placed in a recumbent position, on account, it is conceived, of the mechanical facilities thus afforded for the blood gravitating freely to the head."(1)

The first indication in the treatment of morbid dreaming is to remove the primary morbid action or condition, of which disturbed dreaming may be merely a symptom. Thus, for instance, if an unduly acid state of the gastric juice be, as it often is, the cause of uneasy dreaming, we may cure this by alkaline remedies. If, again, we can trace —as, indeed, in most cases of "paroniria" we may—the morbid dreaming to the reflex irritation occasioned by the accumulation of excrementitious matter in the intestinal canal, purgatives should be administered, and in nine out of ten cases of this kind they will remove the cause of complaint. But if the blood be loaded with lithic or lactic acid (for we will generally find that our gouty and rheumatic patients complain of uneasy sleep and distressing dreams, the transmission of these "blood-poisons" through the brain, oftentimes giving rise to nervous irritation and excitement, which is most marked during sleep in the patient's dreams) it will then be necessary, in the first place, to correct this vitiated state of the blood by mineral waters and other appropriate remedies. In a word, to cure morbid dreaming, we must endeavour to put our patient in the most favourable circumstances for sound and healthy sleep, by removing, as far as possible, every source of nervous irritation.

In conclusion, it only remains for me to apologise for the length of this communication, the only excuse I can offer for which is its importance in relation to the study of insanity. I shall be well satisfied, without aspiring to the merit of any very original theory on the subject of dreaming, if the concise view I have afforded of the pathological indications which are furnished by certain forms of dreaming may attract more attention to this question than has hitherto been given to it by medical writers on insanity. The only way to study the diseased actions of the insane mind with advantage is to investigate the healthy actions of the sane mind; and no condition of the mind in health presents so strong an analogy to the condition of the mind in disease as dreaming, and therefore I think that an inquiry into this state is well calculated to throw light on the causes, the nature, and even the treatment of insanity.

(1) Dr. Forbes Winslow "On Obscure Diseases of the Brain and Disorders of he Mind," p. 583. London. 1861.

ROYAL FREE HOSPITAL.—"At a Special Meeting of the Committee of the Royal Free Hospital, held on the 9th inst., Mr. John Daniel Hill, for many years the Senior House Surgeon, was unanimously appointed one of the Surgeons to he Hospital."

NOTES ON TÆNIA MEDIOCANELLATA (OF KUCHENMEISTER), OR T. INERMIS, BEING ITS FIRST RECORDED OCCURRENCE IN IRELAND.

By Dr. W. FRAZER, M.R.I.A.,

HONORARY MEMBER MEDICAL CHIRUROICAL SOCIETY OF MONTREAL, ETC.

(Read before the Natural History Society of Ireland.)

TAPE-WORM cannot be considered a common affection in Dublin, nor does it seem very prevalent in any part of Ireland. From patients seen in private practice, I have seldom obtained more than three to six specimens each year on an average, though sometimes two or three of these cases will present themselves in rapid succession. The subject of entozoa having recently attracted more of my attention than usual, I became convinced, from investigating the history and symptoms complained of by those individuals I had seen, that there were in Ireland at least two distinct varieties of tape-worm, which I had before always confounded together, and failed to determine their specific characters with that strict carefulness the question demanded, and there were grounds for concluding these would prove to be the common T. solium, and its more formidable relation, T. mediocanellata, a correct description of which we owe to Kuchenmeister. My surmises respecting the latter worm received ample confirmation a few days since, by a gentleman bringing me the specimen now recorded, which, so far as I can ascertain, is the first recognised example of T. mediocanellata of indigenous origin.

The host of this parasite, a gentleman in the prime of life, of robust frame, in perfect health and good condition, consulted me for an eruption of isolated patches of psoriasis scattered over his limbs and body. He also stated that for at least fourteen years past, and possibly for a longer period, he was infested with tape-worm. Its presence caused him great annoyance, as the mature isolated joints of the animal passed from him at irregular intervals, with or without alvine dejections, several of them in succession escaping whilst he was walking about his occupations, or when warm in bed. He had endeavoured to get rid of his unwelcome guest by using the ordinary round of vermifuges, and related his experience with Kosso and Kamela. He preferred the Kamela, its dose being smaller and therefore easier taken, and it had the advantage of being tasteless; he also thought it more effectual, for he succeeded by its means in removing (besides a few small detached fragments) one continuous mass of adhering joints, fifteen feet in length, which he measured after its expulsion, whilst still alive and in motion.

He was anxious to have his pest, thoroughly expelled, and volunteered, with this design, to carry out any reasonable directions. I recommended him to take early in the morning a full dose of castor-oil, and use for that day soft food and soup, &c., to expose the animal more completely to the action of the special vermifuge selected. This consisted of ethereal extract of male fern, which he took, fasting next morning, made into emulsion with yolk of egg, and flavoured by essence of peppermint. It operated briskly, and expelled quite dead a good specimen of T. mediocanellata, which measured seven feet in length in one unbroken piece, in addition to some small segments and detached joints belonging to the upper portion of the animal. The head was not obtained, it seldom comes away with the joints after medical treatment, at least far less often than is supposed. As these creatures contract in size considerably after death, its length when living must have reached eight or perhaps nine feet.

The constitutional symptoms caused by this worm were obscure, and insufficient to diagnose its existence, which was best recognised through the constant expulsion of its joints. Close enquiry elicited from the patient that his appetite was irregular, and at times craving, that he felt uneasiness and unpleasant sensations in his left hypochondriac region, and, though more seldom, some pains were experienced in the region of the heart, and extending down the left arm.

The proglottides at the upper portion of the animal are considerably broader than long, the transverse exceeding

the longitudinal measurement by at least five or six times. Seventeen of these adhering segments occupy a space of one inch. They are easily detached from each other, possessing slight cohesion when compared with the more developed and larger joints. About eight inches lower down fourteen segments were contained within the inch. After this they rapidly became elongated, and assumed the ordinary appearance of common tapeworm, but the ultimate large segments each reached the bulk of 6-10ths of an inch. This striking resemblance of the upper joints of T. mediocanellata to the broad shallow joints of the rare Bothriocephalus or Russian tapeworm, is a distinctive character of the animal. They are easily separated by observing the different position of the sexual aperture, which is lateral in the Tæniæ, and median in Bothriocephalus.

To sum up the principal distinctions which separate the two tape-worms found in these countries, the following brief particulars will suffice :—

1st. T. mediocanellata is a larger animal; it acquires greater length, is thicker, and its segments broader than the T. solium. According to Kuchenmeister, when mature, its average length is at least double that of the latter.

2nd. The proglottides are reproduced with great rapidity, and are remarkable for the freedom with which they escape from the patient : "proglottides permagnæ et pervivaces, sæpissime sponte et sine fæcibus humanis ex ano demissæ."

3rd. Its head which, as already mentioned, is seldom obtained by medical treatment, is "unarmed." It presents no ring of hooklets, is destitute of rostellum, and studded by four conspicuous dark coloured suctiorial disks or acetabula.

4th. The sexual apertures, which are disposed in T. solium with considerable regularity on alternate sides of the successive joints, are distributed in mediocanellata with exceptional irregularity of arrangement, though always opening on the lateral aspect ; they are conspicuous apertures that lead to a complicated, much branched, and peculiarly arranged sexual system. The trivial name of the entozoon is derived from a median thick walled canal or tube, which Kuchenmeister considers continuous, extending from joint to joint.

Experiments carried out by Leuckart, and repeated by Meisner and others, have traced the development of this cestoid animal with much success. When calves are fed with mature joints they soon suffer from severe febrile symptoms, and other evidences of acute disease ; after a short time their muscles are found permeated by innumerable minute hydatid cysts, each contaning within its cavity heads of cysticerci, resembling in every particular those of the mature worm. Leuckart failed in inoculating the sheep or the pig, and other observers have confirmed his statements.

Professor Aitken at Netley, obtained several specimens of this tape-worm from soldiers, principally from men who had returned from serving at the Cape of Good Hope, and Professor Cobbold remarks in his work on Entozoa that he was surprised on looking over the collection of tapeworms at Middlesex Hospital to find at least half their number referable to this species. I believe it will be found equally common in Ireland, with the ordinary tænia solium, though the present instance is the first I am acquainted with in which its characters were recognised, and its claims advocated to be considered a member of our indigenous fauna.

CASE OF INTERTHORACIC CYST.

By THOMAS FALCON, M.R.C.S. & L.S.A.

On the 8th of February last I was called in to visit Mr. Jackson, of Pudsey. I found him very weak and emaciated, fainting whilst standing. On the occasion of my first examination of his chest there was no roughness, but an utter absence of the respiratory murmur, both beneath the left clavicle and over the whole anterior surface of the left side of the chest. The dulness on percussion on that side was greater than I had ever witnessed. The impulse of the heart was felt to the right of its usual anatomical situation, and this abnormal position gradually increased until it was felt beating on the right side of the sternum. The respiratory murmur was distinctly audible over the right side of the chest, both anteriorly and posteriorly, and percussion also indicated a perfectly sound condition of the lung on that side. There was a slight cough, with expectoration of a little mucus. The veins, on the external surface of the left side, were much enlarged, evidently caused by pressure on, and obstructed circulation in, the intercostal and other internal veins. The intercostal spaces on that side were tense and rigid. Dr. Deville, of Leeds, met me in consultation on the case, and he gave it as his opinion, that a tumour had formed in the anterior mediastinum, pushing the heart to the right side, and so compressing the lung as to obstruct the entrance of air anteriorly. The respiratory murmur was indistinctly heard on the posterior part of the affected side. The case could not be one of empyema, as there had been no previous pleuritis ; neither was there any protrusion of the intercostal spaces, nor perceptible fluctuation, and the respiratory murmur would have been inaudible posteriorly as well as anteriorly. The sounds were not altered by any change in the position of the body. The most extensive tubercular deposit would not have rendered respiration inaudible on the fore-part of the chest. It could not be hydrothorax, as there had been no previous disease of the heart or lungs, neither was there dyspnœa in lying down. Mr. Jessop, of Leeds was called into the case after my dismissal, and on Saturday, April 27th, punctured the chest, evacuating, as I am informed, some pints of turbid serum. The patient survived the operation till the evening, when he suddenly expired. It would appear, therefore, to have been a large cyst. Are there any instances on record of large interthoracic cysts having been punctured with success?

Hospital Reports.

MATER MISERICORDIÆ HOSPITAL.

CLINICAL REPORTS BY DR. HAYDEN.

HEREDITARY SYPHILIS, WITH A PECULIAR DEVELOPMENT OF THE NAILS AND CUTICLE.

Anne B——, eight years old, was brought to the hospital by her mother, a respectable-looking woman, and admitted under my care in July, 1866. The mother reported that up to the age of two years the child had been apparently healthy, but *mute*. About that time an eruption appeared on the skin, which has continued up to the present, and latterly become much aggravated. She denies, both for herself and her husband, syphilitic infection, and cutaneous eruption of any kind. The appearance and condition of the child is strikingly peculiar. The head is globular, and the scalp covered with pityriasis ; the bridge of the nose depressed ; the front teeth crowded, both in the upper and lower jaw, but not numerically in excess ; they are disposed somewhat angularly, so that the anterior surface of the incisors have an oblique, or somewhat lateral, instead of a directly forward aspect. The edges of the incisors are remarkably and finely serrated, and the teeth themselves are somewhat dwarfed. The child is partially deaf, and almost completely mute, being able to utter only monosyllables, such as "no," "yes," "babe," &c. She is rather intelligent, but refractory and petulant. The neck, trunk, and arms are covered with a thick layer of furfuraceous scales, and in several situations, where the skin is naturally creased, as on the sides of the neck and palms of the hands, there are deep fissures with thick crusted edges, and angry-looking surfaces. The nails, both of the fingers and toes, have become greatly elongated and thickened, forming rough, irregular masses of a dark-grey colour, resembling piles of scab. The most remarkable of these is

attached to the thumb of the right hand; it is at least half an inch thick, and about equal in length. On this hand (right) the nail of the index-finger alone is unaltered. On the left hand the nails of the thumb and index-finger are unaffected. Of the toes of the left foot, the nails of the fourth and fifth alone are hypertrophied, but on the right foot all are affected except that of the great toe.

Examined microscopically, the deep and soft portion of one of the overgrown nails exhibited only epithelial elements, and a few minute, circular, well-defined, and highly refractile dots, manifestly fatty.

On the palms of the hands and soles of the feet there were large patches of thick-crusted scab, the intervening skin being dark red; a similar, but much thicker mass of scab covered the dorsal surface of the right elbow; and a large nodule of scab, of the size of a hazel-nut, existed on the outer surface of the right leg, above the external malleolus. These scabs presented the appearance of rupial growths.

Owing to the state of the feet, and the outgrowth of the nails, the child was compelled to wear boots about two sizes too large for her, and she walked with the feet arched and the toes inverted.

The entire cutaneous surface is rough and tuberculated, and communicates to the hand a sensation similar to that experienced on passing it lightly over a rough-casted wall.

The treatment consisted in a hot-air bath every second day; an ointment, consisting of oxyde of zinc and sulphur ointment in equal proportion, to be rubbed into the surface; occasional washing with glycerine soap, and five drops of Donovan's solution, largely diluted, three times a day after meals; nutritious diet.

July 26th.—Several of the nails have been shed, and replaced by others of a healthy appearance. The fissures in the neck have been healed, and the crusts are scaling away from the hands, feet, and other parts. The child is greatly improved in appearance and in general health.

October 3rd.—Owing to symptoms of gastric irritation, the arsenical solution was discontinued.

On the 10th there were symptoms of laryngitis, but a satisfactory examination of the throat could not be made, owing to the obstinacy of the little patient. Since the 3rd she has been supported almost exclusively upon milk and lime-water. Tongue is now clean and moist; vomiting has ceased, and she is able to take solid food. Crusts are, however, reforming on the hands. Subsequently to this date (13th), and coincidently with improvement in the condition of the stomach, symptoms of acute broncho-laryngitis were manifested, the treatment of which was greatly embarrassed by the unconquerable obstinacy of the little girl. The treatment was, of necessity, confined to hot vapour inhalations, mercurial inunction, and counter irritation, as the patient would not take either food or medicine.

On the 21st she died of asthenia, and slow asphyxia, which, owing to the existence of extensive bronchial inflammation, did not admit of operative interference.

Remarks.—In the fissuring of the hands and neck, the remarkable thickening of the nails, and the scabrous condition of the general surface, this case bore a striking resemblance to "lepra tuberculosa," but from this disease it differed in the absence of great hypertrophy of the skin, and of depilation of the eye-brows and eye-lashes.

At a recent meeting of the Epidemiological Society Dr. Gavan Milroy stated, that within the last four years he had seen four distinct cases (of true leprosy) in Metropolitan Hospitals—three in Guy's Hospital, and one in University College Hospital. He suspects that traces or vestiges of leprous diathesis are not very unfrequent among us in the United Kingdom.

The condition of the teeth was unmistakeably that described and depicted by Mr. Hutchinson, as characteristic of inherited syphilis. The imperfect development of the head, the mutism, and the partial deafness, as indicating congenital imperfection of the encephalon, likewise pointed in the same direction.

Possibly, therefore, the affection from which this child suffered was of a mixed character—partly leprous, and partly syphilitic. The success, as regards the state of the skin, which attended the arsenical and mercurial treatment, may be adduced as collateral evidence in favour of this view.

It is much to be regretted that inflammation of the gastro-pulmonary mucous tract, which I cannot altogether dissociate from the continued use of the arsenical solution, should have prevented the cure of this remarkable case.

ADELAIDE HOSPITAL.

CANCER OF THE TONGUE—REMOVED BY LIGATURE AND EXCISION—RECOVERY.

Under the care of Mr. B. WILLS RICHARDSON.

THE following case of cancer of the tongue possesses some interest from the fact of its having afforded grounds for the supposition, that in it were combined the scirrhus and epithelial forms of the disease.

This question of the co-existence of two varieties of cancer in the same tumour or in the same ulcerating growth, although dogmatically assumed by some writers, is, notwithstanding, so full of difficulty, that it would be rash to speak too positively in its favour. The great embarrassment in the matter being, that the cells formed in a supposed mixed cancer, may be cells intermediate in characters to those of different varieties of cancer, and in the existence of which Paget believes.

The chief difficulty, to my mind, in this matter is, that as young epithelial cells have relatively larger nuclei than the adult ones, the young epithelial cancer cells may be similarly endowed, and, consequently, in a specimen having small cells with large nuclei mingled with cells or scales resembling those usually seen in epithelial cancers, the former may be merely the young or immature condition of the adult epithelial cancer cell.

If, as Mr. Paget observes, cells with such large nuclei occur alone in a quickly growing epithelial cancer, they may produce a fallacious appearance of an intermediate form of cancer.

Lebert and Hannover, he reminds us, are satisfied that two kinds of cancer may be mingled in one mass, and that he may have been deceived by a specimen such as they described.

In the case now recorded I also may have been deceived by young epithelial cells, which I may have mistaken for scirrhus cancer cells. They had, however, some characters which induced me to suspect the cancer to have been composed of scirrhus and epithelial cancer.

CANCER OF THE LEFT SIDE OF THE TONGUE.

(Reported by Sir CHARLES COOTE, Bart.)

T. W., æt. 58, shoemaker, was admitted into the Adelaide Hospital, Dublin, on the 30th of October, 1866, to have a cancer removed from his tongue by Mr. Richardson.

He was a constant attendant at the hospital dispensary for some weeks, and had been, on various occasions, urged by Mr. Richardson to permit the removal of the diseased part while it was limited in extent, there being little doubt of its cancerous nature.

He took a considerable time to "nerve" himself for the operation. But, at last feeling that the disease was enlarging its area, he mustered resolution to submit.

The following history of his case was gathered from him:

He stated that he had been a smoker from his boyhood, and always held the pipe at the left side of his mouth. Four years ago he discovered a small "pimple" on the left side of his tongue, which, not then occasioning annoyance, he refrained from showing it to a surgeon.

In a short time afterwards, ulceration commenced in the site of the "pimple," and as it was accompanied by shooting pains radiating from this part and by foul breath, he was at last induced to seek relief at the dispensary.

Detergent gargles and alterative medicines were ordered, but at the same time an operation was suggested, no doubt

Fig. 1.

Mixed Cancer ?

J. W. . . . æt. 58.

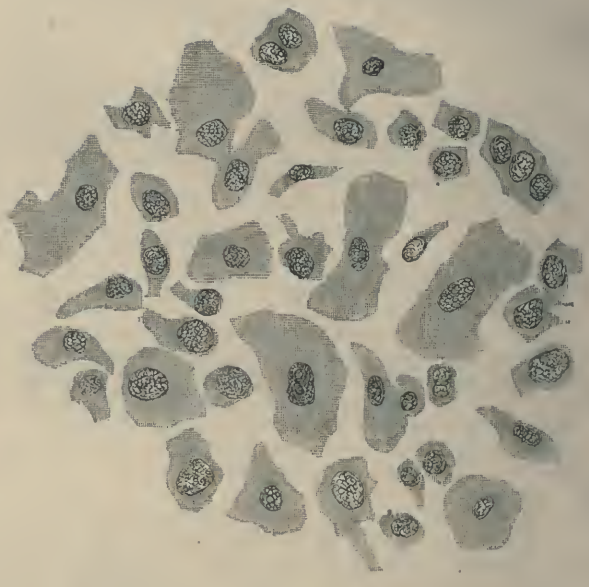

Fig. 2.

Cells similar to the Cells found in Epithelial and in Scirrhus Cancers, and which were intermingled in the Cancer removed from Wells' tongue.

The Epithelial Cells predominated in the portions of the Cancer examined. Magnified 230 Diameters.

having existed as to the malignant nature of the disease. This advice he was then reluctant to follow. The ulcer in the meantime continued to progress, and became ultimately so painful, and caused such annoyance that it forced him to apply for admission into hospital.

He is a thin, weak, sickly-looking man, apparently much exhausted, and suffering from the *malaise* caused by pain, anxiety, and loss of rest. His countenance is extremely anxious. His skin is of a slightly leaden hue, and his pulse ranges from 80 to 100.

He never had suffered from syphilis. There is no albumen in his urine.

At the left side of his tongue, a little anterior to its middle, there is an ulcer about the size of a florin. The base and margin of the ulcer are indurated. The margin is likewise elevated, nodulated, hypertrophied, and partly undermined. The induration does not extend quite to the middle longitudinal line, nor so far backwards as a transverse line that would divide the tongue into an anterior and posterior half. The central or ulcerated part is tolerably deep relatively speaking,—dirty and fetid. Radiating pains shoot from the site of the ulcer. These pains are usually most frequent and intense at night. They are sometimes felt to pass into the left side of lower jaw, and along the left side of the face to the temple. The pains are aggravated by eating, and the movements of the tongue consequent thereon.

Enlarged glands cannot be detected.

The patient having entered the hospital to have the disease removed, the 7th of November was selected for the operation.

The ether-spray was allowed to play upon the tongue until local anæsthesia was produced; the tongue was then seized and drawn forwards by Dr. Walsh, while at the same time Dr. Barton retracted the left cheek. Mr. Richardson then passed a strong, doubled, hempen ligature through the centre of the organ, keeping well clear of the disease. Having removed the curved needle, cut the loop, and separated and differentiated the threads, he tied each half as tightly as possible in notches, (Fig. 1, Plate), which he cut in the tip and at the side, with the intention of preventing the ligatures from slipping towards the ulcer. Mr. Richardson then excised as much of the strangulated part as was possible, without endangering the ligatures, in the expectation that, by so doing, future fetor would be diminished, the bulk of the part to separate being thus lessened.

As far as possible the local effect of the ether was maintained during the whole procedure.

When he was sent to his ward, some blood oozed from the notches, but was quickly arrested under the constant application of ice to the part, and by the use of the following lotion :—

℞ Acid gallic. . . . . ℥iv.
Glycerini . . . . . ℥ii.
Tinct. maticœ . . . . ℥ss.
Aquæ ad . . . . ℥x.
Misce. Ft. lotio.

Wine, oz. 6. Essence of meat, &c., middle diet.

Nov. 8th.—Had a good night; pulse 72; right side of tongue somewhat swollen; shining and œdematous looking. This swelling is but trifling, which Mr. Richardson attributes to the use of the ice. There is but little salivation to-day. The anterior part of the strangulated mass is of a dark colour, and gives off great fetor.

Same diet and stimulant, and the following lotion in place of that previously ordered :—

℞ Lig. potass. permanganat. . . ℥iii.
Aquæ destill. ad . . . ℥viii.
Misce. Ft lotio.

9th.—Right side of the tongue not so swollen as it was yesterday; pulse 76; fetor not so appreciable. To continue the treatment of yesterday.

10th.—The swelling of the tongue is somewhat less than on the 9th. Slight increase of salivation. Treatment as yesterday.

11th.—Salivation lessened. The tongue pretty much in the same condition as it was on the 10th; pulse 73. Same diet, &c.

15th.—In consequence of the ulcerative process having caused the ligatures to loosen, and as the portion of tongue included within them is very nearly detached, Mr. Richardson removed it in the following manner, with but trivial loss of blood :—Having cut the anterior ligature, its lower end was held secure with an artery forceps, so that when Mr. Richardson drew the ligature forward by the other end, it could be prevented from passing through the hole it occupied. Mr. Richardson next passed the end he held through the loop of a new, doubled ligature, and secured the two together. Then, with the assistance of the old ligature, he drew the new one into the place which it had formerly occupied. Having separated the two halves of the ligature, and tied them tightly, the piece of tongue was thus cut through, and removed.

The same treatment was continued, with the exception of the permanganate of potash lotion, which was replaced by one of carbolic acid, in the form of carbolate of soda, thus :—

℞ Acidi carbolici . . . ℥iii.
Bicarb. sodæ . . . ℥ss.
Aquæ ad . . . . ℥x. Misce.
Ft. lotio.

This was found to be an excellent combination, and is, probably, somewhat similar to a solution of carbolate of soda now so extensively used in France for deodorising and antiseptic purposes.

16th.—Rested well; pulse only 68; fetor completely corrected; wound or gap, made by the operation, healing circumferentially, and its surface remarkably clean. Having fancied a mutton chop, he was ordered to have one daily, along with his other diet.

20th.—Is up every day; pulse 72; is improved in appearance, having gained a little flesh; is a better colour, and has lost his dejected countenance. Wound gradually contracting.

It is unnecessary to give any of the remaining daily reports of this case. I may state that the sore gradually healed, leaving a much smaller gap than might have been expected after so great an ablation.

The site of the operation was greatly healed by the first of December, and the man was discharged on the 6th of January following. At this date his countenance was in favourable contrast with the look he had presented on his admission into hospital.

I have been informed that he visited the dispensary upon two occasions since he was discharged; and that there was no appearance of a recurrence observable.

It has been frequently observed to me, while advocating the removal of certain cancers, that, inasmuch as the disease was almost sure to return, why submit the patient to an operation? Grant it. Still it appears to me that, notwithstanding the chances of recurrence are so great, yet much advantage may, in many cases, be derived from their ablation. In the first place, there is the *remote* chance of non-return and cure. Secondly, the less favoured patients are yet subjects of a temporary successful operation, which has relieved them for a time of a painful, and frequently of a foul and harassing disease.

I think we must be constrained to agree with Mr. Paget, that what I shall call the interregnum between the operation and the recurrence should be considered as so much time added to life.

I have already mentioned that I am inclined to believe Wells' case to have been a mixed form of epithelial and scirrhus cancers. Many of the cells represented in the drawing (Fig. 2, Plate) are so like those seen in scirrhus cancer, that I cannot bring myself to consider them to have been young epithelial cancer cells. Besides, if the immature cells of the latter variety of cancer bear a decreasing ratio in size to the increasing enlargement of the growing cell itself, it could scarcely have occurred in Wells' cancer, for it appears to me that many of the nuclei kept pace in rela-

tive growth with that of their containing cell, as also illustrated in this drawing.

Taking this presumed fact into consideration, with the fact of the presence of many caudate and battledoor-shaped cells, so like those seen in scirrhus, I cannot divest myself of the idea but that Wells' tongue cancer was a mingled variety of scirrhus and epithelial cancers. If the observation of Virchow should be confirmed that cancer proper has, in addition to its characteristic elements, also those of an epithelial character, of course there could be no doubt whatever as to the compound nature of Wells' case. I ought here to observe that throughout my observations I have called the malignant disease having epithelial structures, epithelial cancer, believing, with Paget, Rokitansky, and Virchow, in the close affinity between epithelioma, or cancroid as it is called by some surgeons—the scirrhus—and the medullary cancers.

It is to be regretted that so many inaccurate representations of the cells seen in cancers have been published, while drawing to scale has been so frequently neglected, that they are almost valueless to the student.

In order to avoid error of delineation as far as possible, I have been in the habit of tracing the cells, as well as some other structures, on prepared box-wood, for the engraver Mr. Oldham, the magnifying power of the glass, with the image apparently thrown upon the wood, having been carefully and accurately ascertained. By so doing, there is less risk of error than if the drawings are made on paper or card, to be subsequently transferred to the wood by the engraver.

Every possessor of a microscope who wishes to have accurate drawings made with the assistance of his magnifying powers and the camera, should ascertain for himself the amplifying power of each objective with the image of the object thrown upon either box-wood, of type depth, or the table itself, the lower surface of the stand and the surface of the table being upon the same level.

These points have been insisted upon by writers, particularly so by Dr. Beale, and should not be neglected, or inaccuracy must be the result.

Summary of Science.

(Specially Edited and Compiled for the Medical Press and Circular.

By CHARLES R. C. TICHBORNE, F.C.S.L., F.R.G.S.I., &c.

[The Editor of this Summary wishes it to be understood that he is not responsible for the ideas, theories, or the correctness of statements made in any of the papers quoted in the compilation.]

DECOMPOSITION OF ACTYLENE BY THE INDUCTION SPARK.

If actylene (C^2 H^2), says M. de Wilde, is passed into a dry eudiometer over mercury, on the passage of the spark, a small quantity of carbon is deposited between the wires. If this carbon is knocked off by agitating the eudiometer, and the spark again passed, the same phenomenon takes place. After some time no agitation is necessary, and the decomposition proceeds uninterruptedly. In ten or fifteen hours all the actylene is decomposed; the gas is found to be hydrogen. The actylene should give its volume, but there is always a loss from absorption by the deposited carbon, or other causes. This experiment is important, as illustrative of the splitting up of the hydro-carbon into its elements by the induction spark.—*Bulletin de la Société Chemique de Paris.*

ON THE USE OF GLYCERINE FOR THE PRESERVATION OF SULPHURETTED HYDROGEN.

I have found, says M. Lepage, a substance which I have employed for three years, and which, without injury to its reactions with metallic salts, preserves sulphuretted hydrogen, and secures to that gas a stability of a considerable duration. To prepare this solution, it is important to provide one's-self with chemically pure glycerine. That called Price's will answer the purpose perfectly, when diluted with its own weight of distilled water. Saturate it with washed sulphuretted hydrogen gas, using the ordinary apparatus of the laboratories.

Trials have shown me, says M. Lepage, that the mixture of equal parts of distilled water and of glycerine dissolves less of the gas than pure distilled water. My experiments are represented by 100 degrees, which represents the strength of the saturated watery solution. I find that it is only 60 for the glycerine mixture. At the end of six weeks or two months an aqueous solution of sulphuretted hydrogen gas is generally decomposed when kept in a vessel which is frequently opened. On the contrary, under the same conditions, a solution in glycerine, which gave 60 degrees at the time of its preparation, still marks 50 to 56 at the end of six weeks or two months.—*Journal de Pharmacie et de Chimie,* April.

TEST TO DISTINGUISH BETWEEN CITRIC AND TARTARIC ACIDS.

Messrs. Chapman and Smith, "Laboratory," propose the action of a solution of permaganate of potassium as a distinguishing test between these acids. According to these gentlemen, if a salt of citric acid is added to an alkaline solution of permaganate of potassium, and boiled, the fluid becomes green; but if tartaric acid is substituted for citric, a copious deposit of binoxide of manganese takes place. If this process will determine the adulteration of citric acid with tartaric acid (a common occurrence), Messrs. Chapman and Smith have pointed out a ready test. Care must be taken in both cases to render the solution very strongly alkaline.

PHYSOSTIGMINE.

C. Hesse has resumed the examination of the poisonous principle contained in the Calabar bean. The freshly prepared alcoholic extract of the bean, is shaken with bicarbonate of soda and ether—very diluted sulphuric acid takes the physostigmine from the ether, and in its turn gives it up when treated with bicarbonate of soda and ether. The ether, on evaporation, leaves the pure alkaloid. It is tasteless, uncrystallisable, capable of enduring for a short time a temperature of 212° Faht., but presently decomposing. It is easily soluble in alcohol, ether, benzol, chloroform, and bisulphide of carbon—difficulty so in water. Its solution is strongly alkaline, and perfectly neutralizes acids. Solutions of its sulphate, chloride, or acetate are tasteless and colourless, become pink on exposure to the air, and are decolourized by reducing agents or animal charcoal.

The colouration, which is intense when the solutions are made alkaline and heated, results from oxidation. Its formula is C^{30} H^{21} N^3 O^4. A solution of iodine in iodide of potassium, produces with it a crimson precipitate; it is also precipitated by iodide of mercury, iodide of potassium, chloride of gold, chloride of mercury, and tannic acid, but not by chloride of platinum.*

TOLUIDINE.

Mr. Alfred Wanklin says that toluidine is absolutely incapable of neutralizing diluted sulphuric acid. This property of toluidine exhibits it in striking contrast with ethylamine and many other organic bases which are known to saturate acids completely.—*Laboratory.*

CORIAMYRTIN.

This is the name given by J. Riban to a neutral substance obtained from the expressed juice of the *coriaria myrtifolia* (the poisonous myrtle leaved gumach). Coriamyrtin C^{29} H^{36} O^{10}, is very poisonous. It is solid, white, crystallizes in oblique rhombic prisms, slightly soluble in water, but is very soluble in alcohol or ether. It turns the plane of polarization to the right; does not combine with acids or with chloride of platinum, but contains H^2 replaceable by chlorine or bromine. A trace of this substance moistened with hydriodic acid and evaporated in a water-bath, gives an intense purple-red solution when an alcoholic solution of soda is added.

* Physostygmine is not to be confounded with eserine, an alkaloid said to be discovered M. Vée, in the Calabar bean. This latter chemist says that eserine is the active product in the bean, and exhibits some specimens in the Paris Exhibition.

VAPOUR DENSITY OF NITRIC PEROXIDE.

St. Clair, Deville, and Froost, get numbers corresponding to NO_4 (four volumes), if the formula be doubled and written $N_2 O_8$, then the equivalent volumes must be 8.

ACETO-SILICIC ANHYDRIDE.

To a mixture of monohydrated acetic, and acetic anhydride, rather less than the proportional quantity of silicic, chloride is added. The mixture is boiled as long as hydrochloric acid is evolved; on cooling, the anhydride crystallizes out, and after washing with anhydrous ether, is comparatively pure. It is the first crystallizable organic compound containing silica. It is white, decomposes at about 165° under normal pressure, but may be distilled at a pressure of five or six mil. at 148°. It melts at 110°, its formula being $SiO^4 (C^2 H^3O)^4$. It corresponds exactly to Eblemen's ethylic silicate $Si O^4 (C^2 H^5)^4$. It is decomposed by water into silica and acetic acid.—*Friedel and Ladenburg.*

NEW MODE OF PREPARING SULPHUROUS ACID.

M. Stolba *(Journal für Praktische Chemie)* proposes the following mode of preparing this acid:—The sulphates of iron, copper, and lead, calcined with sulphur, disengage sulphurous acid. If the sulphate of iron is employed, a sulphide of iron is left in a desirable state for making sulphuretted hydrogen; twelve parts of dried sulphate of iron are used with five of sulphur. If it is desired to use the residue for making sulphuretted hydrogen, it must be kept well excluded from the air, as it is pyrophoric.

THE RARER METALS IN MINERAL WATERS.

M. Wartha says that the mineral waters of Ems contain cæsium and rubidium, but no thallium.

M. Stolba has also noticed the presence of the first two metals in the mother liquors of nitrate of potash.

DR. THUDICHUM'S REMARKS ON EXTRACT OF MEAT.

Dr. Thudichum remarked, in his evidence before the Society of Arts, "that extract of meat lacks the essential properties of nutriment. There is a prevalent but erroneous opinion that extracts of meat, particularly that prepared on Dr. Liebeg's plan, are nutritious. Tea and coffee will not nourish a man, but both tea and coffee are strong stimulants of the nerves of the heart, and of the brain; and it is likely, I think, that the extracts of meat contain a substance which is something similar in its effects to these stimulants." This is the view, I believe, that Liebeg himself takes of his extract. "If the Committee," says the doctor, "desire to know whether I should recommend them to have experiments made upon the extract of meat of Liebeg, I must answer that I do not see that any experiments are necessary, unless they wish to open the entire question—What is the sense of our drinking beef-tea, or drinking broth? There is so little nutriment in it, that if you dissolve a teaspoonful of the extract in a cup of water, and drink it, you will not receive so much nutriment as you would derive from a single mouthful of meat." Dr. Thudichum surely does not mean to say that this is Liebeg's views. Beef-tea seems to have an important effect, but the effect is not in the sense of nutriment; it is due to the specific effects of certain ingredients, especially creatine, the action of which in some degree resembles that of theobromine. (Theobromine is now shown to be a methyl compound of caffeine, or theine.—Ed. S.) Again, in beef-tea are potassium salts, which the body requires for the production of muscular power. Potash is as essentially an element in the chemistry of muscles as in that of the blood. Then, again, there are contained in beef-tea certain acids, of which lactic acid is one, and inosic acid another. If there is an absence of flavour in any kind of meat, lactic acid, if mixed with the gravy during preparation, acts as a substitute, and produces a relishing flavour—the fine flavour of meat; the osmazone which provokes appetite is due in part to the action of lactic acid.

We have to rely on these principles for an explanation of the efficiency of beef-tea, creatine and creatinine, paralactic acid, inosic acid, inosite, and potassium salts—which are essential, and which are not, we cannot at present say.

Too strong a solution of extract of meat is as bad as too strong tea or coffee. In answer to the chairman (Right Hon. H. A. Bruce, M.P.), who put the question, that if salt meat being an imperfect food, whether this extract of meat would form a compliment to that? Dr. Thudichum said "that he did not think so, because salt meat has been deprived of a certain amount of albumen." However, the loss of nutritious value from "salting meat is not very great on the whole." As regards the nutritive qualities in meat itself, which the extract does not contain, we find the following list of substances in fresh meat:—First, albumen, then syntonine (fibrin?) When we mince meat and extract the albumen by means of water, there remains this syntonine undissolved, but when mixed with dilute acids it becomes a thin jelly, and is afterwards dissolved. Then myochrome, the colouring contained in the muscles—this is chemically identical with the colouring matter contained in the blood. The use of this latter is to take up oxygen, and to oxidise the noxious products of the spontaneous decay of albumen, giving out carbonic acid. If the meat were shut up close after being killed, it would become putrefied in a few hours. This myochrome is a compound body containing a quantity of iron; it is dissolved with the albumen, and precipitated with it during boiling. Lastly, very little gelatine; then, the constituents as before-mentioned of beef-tea, with a brown syrupy matter, which is not more definable at present. Inosite is a kind of sugar met with in French beans, also contained in muscle and in beef-tea. An occasional product is animal dextrine or hepatin, or glycogenic substance from the liver. Sometimes in working half-a-hundred weight of meat, the chemist may get a pound of this matter, at others he may not obtain a trace. When beef-tea is made, the albumen and the myochrome of the meat are made insoluble by boiling; the syntonine also is undissolved. After straining there is nothing left in beef-tea but inosite, creatine, creatinine, lactic, and inosic acids, potassium, salts, brown syrupy matter, and occasionally glycogen, but the latter would be probably absent from the extract prepared by Liebig's company. Of these, from 7 to 10 per cent. of soluble solid matter, from 4 to 4½ become again insoluble by boiling, so that it is not far wrong to say that only from 3 to 5½ out of 25, or from one-eighth to one-fifth of the whole of the solid constituents of meat pass into extract or beef-tea. From four-fifths to seven-eighths of the solids are rejected.

ARSENATE OF ETHYLE.

Mr. Craft causes iodide of ethyle to react upon arsenate of silver, avoiding an excess of the former. The composition is

$$As (C_2 H_5)_3 O_4.$$

Its density at 0° = 1·3264, boiling point from 235° to 238° C.

ARSENITE OF ETHYLE

Is formed by the action of arsenious acid on silicate of ethyl,

$$As (C_2 H_5)_3 O_3.$$

Its density at 0° = 1·224; boils about 166°. Vapour density corresponds to 2 volumes.

ON THE INFLUENCE EXERTED BY THE MOVEMENTS OF RESPIRATION ON THE CIRCULATION OF THE BLOOD.

This paper (the Croonian Lecture for 1867) was read by Dr. Burdon Sanderson. As it was a very long one, we will merely attempt to give in a few words the conclusions arrived at by the author. The object was to combat the explanations usually given by physiologists of the mode in which the respiratory movements of the thorax influence the force and frequency of the contractions of the heart. The doctrine usually taught, says Dr. Sanderson, in this and other countries, is stated as follows, in one of the most recent text-books:—"During the act of expiration, the frequency of the pulse is considerably augmented, whilst the line of mean pressure rapidly rises, indicating increased

tension in the arterial walls. . . . . During the act of inspiration, on the contrary, the pulsations become slower, the curves much bolder, and the line of mean pressure gradually falls; for then the blood readily enters the thorax, and as a consequence, the great veins, capillaries, and arterial walls become comparatively flaccid, &c." From numerous experiments, in which the respiratory movements and the variations of pressure in the arteries in the dog, were recorded simultaneously by mechanical means, the author has arrived at an opposite conclusion—viz., that in natural breathing each expansion of the chest is followed by increase of arterial tension, and shortening of the diastolic interval; in other words, that the immediate effect of inspiration is to increase both the force and frequency of the contractions of the heart.

In natural breathing, the influence exercised by the thoracic movements on the heart is entirely mechanical. So long as the respiration is tranquil, variations of air-pressure in the bronchial tubes and vesicles of the lungs do not materially affect the arterial pressure, but violent expiratory movements are accompanied by simultaneous increase of vascular tension.

DECOMPOSITION OF SALTS BY INERT GAS.

Mr. Grenet has discovered the very remarkable fact of the decomposition of a certain number of bodies by the simple passage of a current of inert gas. For example, taking a solution of carbonate of lime, barytes, or potash, through which passes a current of nitrogen, hydrogen or air, the lime, barytes, or potash is precipitated, while the carbonic acid is set free. Sulphydrates, sulphites, acetates, and other salts are decomposed under similar circumstances.

CYANOGEN COMPOUNDS OF MANGANESE.

M. R. Fittig.—Manganic cyanide dissolved in cyanide of potassium, and diluted with alcohol, gives a precipitate of small blue plates, which crystallize from a strong solution of cyanide of potassium in splendid dark-blue transparent square tables. Their formula is Mn Cy_2+4 K Cy. The barta salt separates in blue crystalline groups from a solution of acetate of manganese, mixed with an excess of cyanide of barium. It is insoluble in cold, and decomposed by boiling water.

ANILINE COLOURS FROM PROTEINE COMPOUNDS.

Dr. Erdmann observed upon some roast veal, some red matter, by which he inoculated other favourable substances. The red matter increased. The microscope showed that only the proteine compounds were red. Dr. Erdmann seems to think that this red substance is triphenylrosaniline (aniline red).

The following important papers have appeared during the month. In the Proceedings of the Royal Society we have sundry papers connected with the researches brought before the Royal Society, by Mr. Wild, Mr. Siemens, and Prof. Weatstone. The first of these is *On the Theory of the Maintenance of Electric Currents by Mechanical Work, without the use of Permanent Magnets*, by J. Clark Maxwell. Others by C. Varley, W. Ladd, and Charles Brooke. In the same number a paper *On the Computation of the Lengths of the Waves of Light corresponding to the Lines in the Dispersion-Spectrum, measured by Kirchhoff*, the Astronomer-Royal. M. Scheurer-Kestner, continues his investigations on soda, and communicates to the *Bulletin de la Société Chimique, some new Researches on the Preparation of Soda*, by Le Blanc's process. And in the same journal is an interesting paper, by M. Berthelot, *On the Action of Heat upon the Homologues of Benzine.*

In the Journal of the Chemical Society, Messrs. E. Chapman and M. Smith continue their remarks upon *Limited Oxidation*, and propose it as a means of actual analysis. They describe the precautions necessary to procure accurate experiments, and give two illustrations, viz.: Lactate of Baryta, which, on oxidation with chromic acid, yields 7·69 per cent. of carbonic acid (Theory 7·62), so that it is almost as accurate as an analysis with a combustion furnace; whilst the second case gives, *i.e.*, Diethoxalic acid. They state that by this analysis, any chemist called on to deduce the formula of that body from their experiments, could only arrive at one rational formula, practically identical with that proposed by Frankland and Duppa.

The following are examples of their analyses of diethoxailc acid:—

	Found.	Theory.
Carbon existing as Oxtayl, weighed in the form of CO_2	9·10	9·09
Carbon existing in the propylic form weighed as propionate of baryta	27·29	27·27
Carbon existing in the ethylic form, weighed as acetate of baryta	18·20	18·18

In the same journal we have a paper by Dr. Stenhouse, *On the Preparation of Berberine from Coscinium Fenestratum.* This plant is a large rope vine (order menispermaceæ), and is very abundant in Ceylon and India.

The Chemical News (April 5th), contains Dr. Odling's *Classification of native silicates.* And the same journal is publishing an interesting series of papers by D. Forbes, F.R.S., *On application of the Blow-pipe to the Quantitative Determination, or assay of certain metals.* Also an analytical note by Prof. Wöhler *On the Separation of Cadmium from Zinc.* This he effects by adding an excess of tartaric acid, and rendering it alkaline by caustic soda, and then boiling for some hours when the cadmium is deposited. Copper and cadmium the author separate by precipitating the first metal with sulphocyanide of potassium first reducing with sulphurous acid.

In number 2, page 37 of the "Laboratory," under the head of "Royal Society of Edinburgh," will be found a short account by Dr. Crum Brown *On the Application of Mathematics to Chemistry*, in which the author wishes to introduce into the science of chemistry a somewhat similar system of notation to that employed in the higher branches of mathematics. Any paper by W. Crum Brown will be read with interest, but we see many reasons against the introduction of such a system.

(To be continued).

DR. B. W. RICHARDSON ON THE INFLUENCE OF EXTREME COLD ON THE NERVOUS FUNCTIONS.

On the 7th inst., Dr. Richardson delivered the second of his experimental and practical lectures, which was listened to throughout with close attention by a distinguished audience, and fully equalled the expectations formed by the first lecture, on which we have already furnished some observations. The present lecture detailed the results of Dr. Richardson's investigations into the influence of extreme cold on the nervous functions, which, as he pointed out, are completely corroborated by a similar series of experiments which have been made by Dr. Weir Mitchell, of Philadelphia, the two distinguished physiologists having, without any communication with each other, been engaged on the same subject, and arrived at precisely the same conclusions.

The lecturer commenced by expressing his belief that, when the effects of heat and cold upon the nerves of animals are fully understood, medicine will stand where it never has before. He then went on to show that by means of extreme degrees of cold we can cut off all function. We may isolate and study the phenomena, and may carefully observe them in every stage. We may see the process of extinguishing the function of a part, and notice the phenomena that attend its restoration.

The subject naturally divides itself thus :—

1. The effect of extreme cold on the periphery of a nerve.
2. " " " on a nerve trunk.
3. " " " on the cerebrum.
4. " " " on the cerebellum.
5. " " " on the medulla and spinal cord.

We will give, in as condensed a form as possible, the

results of Dr. Richardson's investigations on each of these divisions of his subject.

1. *The effect of extreme cold on the nervous periphery.*—In the first place cold disturbs the function in different degrees, according to the extent of the freezing and rapidity of the recovery. Here he premised that the freezing point of the body of man is about 16° Fahr. Sometimes the degree of cold may be carried below this without freezing taking place. He has produced a cold of 6° Fahr. But, in these cases, in the act of freezing, the temperature rises to 16°, which may therefore be put down as the freezing point of the human frame, since this phenomenon is exactly analogous to the case of water, which may be cooled below 32° Fahr., but rises to that point in the act of becoming ice. In applying cold to the living tissues, we first of all produce redness, heat, and exalted sensibility, but at 16° Fahr. all these effects are removed, to return on a rise of temperature. This was shown by experiment on the lecturer's arm. The ether spray was directed upon the part, and immediately produced redness, &c. Further application of the spray with a more volatile ether at once blanched the surface. From this experiment Dr. Richardson concludes, that the first effect is on the nervous system, which, on the application of the spray, suffers a momentary vascular dilatation, and so supplies a store of heat. But continuing the application a few seconds, the whole store of heat is taken away, and the tissue completely frozen. Hence, he argued that there is always a stage of congestion before the part frozen ; a period exactly corresponding to that of re-action, and which might be termed pre-action. The freezing point differs much in various animals. For instance, in pigeons it is as low as 10° Fahr. We must therefore produce a degree of cold equal to 10° Fahr. before freezing takes place. We may go down to zero in these birds, but there is a rise to 10° in the act of freezing. The blood of pigeons is 10° warmer than that of man. In cold blooded animals it is easier to freeze the part. In frogs it is extremely rapid. This was shown by experiment, the web of a frog's foot being completely blanched by one or two jets of spray.

This fact has an important bearing on cases often seen in practice of extremely low nervous function, and of paralysis. There is in these cases scarcely any nerve force to absorb the cold, and the action is almost immediate on the vessels. There is, then, no pre-action. Dr. Richardson related the case of an old man to whom the spray was applied prior to the extraction of a tooth, and the effect was almost instantly to blanch not only the small part with which the spray came in contact, but the whole jaw. Such a fact as this is of obvious importance in practice.

2. *The effect of cold on the nerve trunk.*—The ulnar nerve is one well adapted for an experiment. On freezing a portion of this, a sensation of pain is produced in the distal direction ; yet, volition passes through, and the muscles supplied by it can therefore be used. So in the next stage, when the nerve is, as it were, dead at the point operated on, and still motor power remains. If one or two inches in extent be completely frozen, sensation is extinct below that point in the parts it supplies. If the nerve be exposed, during the process, the stages are first of all vascularity of the nerve. Then, when quite frozen, it assumes a sort of metallic lustre—it looks like sodium very slightly oxydized, or like a freshly broken stick of phosphorus, in which oxidation is only commencing. Frozen nerve is also quite hard, and, on being struck, communicates a kind of vibration. There is not, indeed, any audible sound emitted, but the sensation conveyed to the finger is similar to that when metal is struck.

With respect to electricity, dry nerve, whether alive or dead, is a non-conductor ; fresh nerve a most delicate conductor. Freeze the nerve and you find the current still passes. Portions of nerve were here exhibited, and the facts demonstrated by one of Pulvermacher's electrometers.

When, therefore, sensation cannot be transmitted by a nerve, electricity will pass through it.

3. *The effect of cold on the cerebrum.*—In the slightest stage we see paleness, then congestion ; then, on its being frozen, we have whiteness, and on recovery again, congestion or reaction. The cerebrum of an animal may be frozen as hard as a lump of ice, and recovery easily take place ; and the experiment may be repeated without injury on the same animal. Dr. Richardson has a pigeon that has been made insensible by freezing the brain forty-six times. On one occasion he had kept it in a state of insensibility for seven hours, and yet it recovered. On freezing the brain of an animal the phenomena that result are, first of all, a peculiar quietness, then follows a little excitement. Continuing the process much excitement is produced—immediately after this stupor and total loss of insensibility; in fact, arrest of everything except breathing. These effects are precisely those of anæsthesia by chloroform, and if two animals were deprived of sensibility, one by the inhalation of chloroform, the other by freezing the brain, it would be impossible, without knowing before hand, to tell which process had been employed on either. Rabbits, in the period of excitement, just before the stupor, often scream in a very peculiar manner. At this point of the lecture a pigeon's brain was frozen, and general anæsthesia produced just as in the case of chloroform. When animals are thus treated in a very low temperature recovery is complete and natural. But in a warm room, when the recovery is very rapid, convulsions often take place. In pigeons may be noticed a peculiar rolling, an attempt to fly or turn over backwards. In rabbits, during rapid recovery, there are often tetanic movements, as if the spinal cord were surcharged with nerve force, and this is the condition the lecturer supposed to exist. It is not a fair experiment to remove the skull from the brain, inasmuch as thereby the effect of pressure in a closed cavity on the return of the circulation is done away with.

When the brain is frozen, large portions of it may be sliced away without producing any effect. The lecturer had sliced off portions of brain down to the corpora striata in rabbits, without meeting those backward and forward movements that have been noticed in birds on injuring these bodies. Dr. Mitchell has seen the phenomena in birds, and therefore there would seem to be some differences between the results of experiments on birds and rabbits.

4. *The effect of cold on the cerebellum.*—In the reaction *in birds* we get backward motion. In rabbits there is simply a break of co-ordination. But there is none of the rolling movement seen in birds.

5. *The effect of cold on the medulla and spinal chord.*—Partial backward and forward movements were seen by Mitchell *in birds*. But in rabbits and dogs the respiration is interfered with. Dr. Richardson observes in the earliest stage excited respiration, then contraction of the chest, and, as soon as the medulla is frozen through, death ; just as when it is divided. The lungs, when the freezing has been rapid, are left quite blanched—as white as milk ; but if the process has been slow, and the respiration some time embarrassed, there may be congestion of the lungs. The heart remains unaffected. Its action is perfect. In fact, at no point of the spinal system can a part be frozen so as to arrest the beat of the heart. Even when the whole cerebro-spinal system is frozen, its function is not disturbed. Yet there is a point in the heart itself on freezing which the organ ceases to act.

If the spinal cord of birds be frozen, we have the backward rolling, the attempts to fly, &c. In rabbits the process produces paralysis, during the reaction convulsions, and with this there is stupor. This is just as when Brown-Séquard produced epilepsy by section. If the reaction be slow we see nothing. If quick, we meet with great convulsion, and sometimes tetanic movements.

The conclusions deduced may be thus briefly epitomised:

(a.) Living nerve freezes at 16° Fahr. The first effect of cold is on the nerve ; and in recovery the vessel first recovers. Hence the phenomena of pre-action and re-action.

(b.) Frozen nerve conveys electricity.

(c.) The brain loses no power after the experiment of freezing. In young sucking animals Dr. Richardson has

observed them immediately after play about, recognize the mother, &c., as if nothing had happened. They seem to wake up just as from sleep.

(d.) The cerebellum may be frozen and restored without injury to the animal.

(e.) Complete freezing of the medulla kills by stopping the breath.

(f.) The spinal cord may also be frozen, and recovery take place.

(g.) The phenomena are vascular congestion before the freezing, and a similar condition on recovery—states which might well enough be called *pre*-action and *re*-action.

(h.) It would seem that arrest of function in the brain would determine congestion in the spinal-chord, and *vice versa*.

THE NEW BRITISH PHARMACOPŒIA.

We are at length in a position to lay before our readers some comments on the New British Pharmacopœia. We believe that it seldom happens that a book is introduced to the public with such a flourish of trumpets as has preceded the publication of the present volume. More than a month ago, articles appeared in several of the Medical Journals sounding its praises, long before any one had much opportunity of judging of its intrinsic merits. We should be sorry to detract in any way from the mede of praise due to those who, we feel sure, have used every exertion to make the Pharmacopœia what it ought to be; still, we think, there are some points which we cannot pass over without recording our strongest disapproval of the course adopted by the Council.

We believe that the change in the arrangement of the work will meet with general approbation. The old division into Materia Medica and Preparations has been swept away; the alphabetical order has been adopted throughout; in every case where the mode of preparing a drug is inserted, it is given side by side with the general characters and tests, thus obviating the want of unity and great inconvenience attendant on the former method, which necessitated a reference to different parts of the volume for the required information.

The lists of preparations given under each drug have been enlarged and rendered complete in the present edition; and we feel sure that this will be found of great advantage, both to the practitioner and the student endeavouring to master the details of the work.

The Council directs our attention, in the preface, to the objects to be obtained by a British Pharmacopœia. They rightly state, that it is intended to furnish the *Medical Profession and Pharmaceutist throughout the Empire* with "one uniform standard and guide, whereby the nature and composition of substances to be used may be ascertained and determined." Again, we are told that the object of the Pharmacopœia is "not the selection, but the definition, of remedies which are required to be kept at one safe and uniform standard of strength and composition." We think the objects of the book are here most accurately defined, and we are at a loss to know why the Council thought fit to step beyond their sphere, and to announce in the next breath that they now appended the *doses* of all the more important medicines, and that they adopt this course "in compliance with a *generally* expressed wish."

We would gladly know whose wish this is. Is it that of the Empiric; or that of the Scientific Therapeutist? We think such a course is utterly wrong in principle, and is calculated to deal a fatal blow to all true Therapeutics. This Science still lacks that precision which, we trust, it will yet attain; its general laws are few, chiefly owing to the jealousies, prejudices, and "hobbies" of Medical Men; and yet we find the General Council of Medical *Education* endeavouring to bar its progress, by stepping beyond their powers and functions, and affording facilities for Apothecaries' assistants, and routine practitioners to drug the public. For to whom can the information given be of any practical use? Not to the student, who finds the dose of opium given as half to two grains, without any indication of the varied actions induced by the drug within the limits set down, and to whom no warning is given as to the danger of administering the drug in this dose to many persons and in many diseases. Nor can it be supposed to be of any service to the well educated practitioner. His study of the action of medicines, unless he be a hopeless empiric, will have taught him, better than the Council can ever do, what the proper dose is; and he will know well how to be guided to the correct dose by the general principles of practical medicine.

Can the Council have had in view that class of men existing in England, and styling themselves in their advertisements in the *Lancet*, *unqualified* assistants? We freely acknowledge that, to persons such as these, it will be a convenience to be put in possession of "the average dose for an adult," as it may fairly be presumed that they are incapable of nicely appreciating the difference in dose to be observed in the treatment of a disease, in its various stages, local peculiarities, and constitutional idiosyncrasies; but we were led to suppose that the Council would do all in their power to extinguish the "unqualified" practitioner, and are sorry to find ourselves mistaken.

This mode of indicating the doses in an apparently authoritative way (for, in a court of justice, and by the ignorant public, it will be looked on as authoritative), can only foster the idea of fixity of dose not warranted by fact, and will certainly lessen the proper stimulus to detailed study of Therapeutics, which, to our knowledge, is so sadly neglected by the student of medicine in the present day.

The Council should consider and remember, that mistakes of this kind will fall, not on them, but on future generations of a defenceless public.

Were it known to the public that men are made surgeons without any knowledge of Materia Medica being required of them, and Physicians with but a very imperfect idea of the properties and therapeutic effects of remedies, it would create a sensation that would shake the present system of examinations to its foundations.

It is in the hospital, under the direction of the physician and surgeon, that the student must learn the action and dose of medicines, and not as furnished in the Pharmacopœia, as a premium on ignorance and indolence.

But the doses indicated by the Council are often inconsistent, and in some cases positively erroneous. In support of the first charge, we quote the case of chloroform and its preparations:—The dose of chloroform is stated to be three to ten minims, while that of spirits of chloroform is given as twenty to sixty minims, corresponding to from one to three minims of chloroform, and that of the compound tincture, twenty to sixty minims, corresponding to from two to six minims of chloroform!

As examples of the second error, we may mention that castor, a drug found by Pareira to be inert in doses of two drachms, is ordered in five to ten grain doses; while anti-

monial powder, a preparation at least ten times as active as the original "Dr. James' Powder," is allowed to be given in quantities of from three to ten grains. We feel certain that if the latter dose be administered, it will in every case almost act as an emetic!

But we hasten on to consider the most important alteration in nomenclature made by the Council, concerning which they are silent in the preface, probably because they would find it hard to adduce any good reason for the course adopted. For many years chemists have differed in opinion as to the atomic weight of mercury; for a long time it was set down as 200, and it was believed to form, with oxygen, sulphur, chlorine, &c., two classes of compounds—the one containing an atom of mercury to an atom of oxygen, chlorine, &c.; the other an atom of mercury with two atoms of the metalloid substance, and, in accordance with this view, black oxide of mercury was named the protoxide, and calomel the protochloride, while the red oxide was called the binoxide, and corrosive sublimate the bichloride. These chemical names found their place in the London Pharmacopœia, and were in use throughout England.

But as chemical science developed itself, it became apparent that there were grave objections to looking on calomel as a proto-salt, and to the old atomic weight of mercury.

In the first place, corrosive sublimate possessed properties in every way analogous to those of a protochloride, while calomel was much more akin to a sub-salt; secondly, the atomic volume, deducible by dividing the old atomic weight (200), by the vapour-density, was double that of hydrogen, while, if it be taken as 100, the volume of an atom is the same as that of hydrogen, this being the general rule for simple bodies; lastly, the law of Dulong and Petit required that the atomic weight of mercury be 100, for otherwise the atomic heat (or product of specific heat and atomic weight) would have been 6·38 instead of 3·19, the numbers expressing approximatively the atomic heat of the class of metals to which mercury belongs.

This view was adopted in the Dublin Pharmacopœia, of 1850, and in the British Pharmacopœia of 1864, and in accordance therewith calomel was called a subchloride, and corrosive sublimate a chloride.

There are some modern chemists who advocate a return to the old atomic weight of mercury, chiefly from a desire to bring the constitution of corrosive sublimate into accordance with Ampere's law, and this view has been adopted in the new Pharmacopœia.

It will be seen, therefore, that the constitution, and consequently the chemical nomenclature of the mercurial compounds has varied, and even at present does not stand on a very sure foundation, so that we are not secure against some new change in the chemical names.

Now, we fancy that what is required by the Medical Practitioner is a nomenclature that will serve accurately to distinguish compounds of such very different actions and doses as calomel and corrosive sublimate, the red and green iodides, of mercury, where a mistake in the identity of the substance may prove fatal.

To the majority of Medical Practitioners a chemical name, we regret to say, conveys no idea as to the composition of the substance, even when that name is well defined, and we know that this ignorance produces a hopeless perplexity of idea, when the same compound has possessed the very different titles of subchloride, *chloride*, submuriate, muriate, mercurous chloride, and calomel.

In like manner, corrosive sublimate has been termed *chloride*, *bichloride*, muriate, oxymuriate, hydrochlorate, mercuric chloride, and to these the Council has thought well to add another, and they now call it perchloride, while they style calomel the subchloride. We congratulate those gentlemen on having introduced greater confusion than ever into the authoritative codex of the Empire; they have consigned to the position of synonyms the *distinctive* and *unmistakeable* names of calomel and corrosive sublimate, and they have burdened us with a new, dangerous, and utterly inconsistent name. We ask why they did not save themselves the charge of want of unity of design in the nomenclature, by calling the red iodide, the periodide of mercury, and the red oxide, the peroxide. Why is the sulphate not named persulphate, and the nitrate, pernitrate?

We trust the Profession will mark their disapproval of this inconsistent and uncalled for change, by never making use of the terms subchloride and perchloride.

We greatly fear that the time is not far off when, in a Court of Justice, it may be urged for the defence, that the confusion created by the Council in the nomenclature of the mercurial salts, was a sufficient exculpation for a fatal mistake.

The Council acted with their eyes open, for these points were urged on them by men of undoubted scientific ability, whose suggestions were contemned.

Having, in some respects, spoken so censoriously of the work, we are glad to record our approval of many of the minor changes made. The descriptions given of the drugs are much more accurate; the tables indicating the strengths of the different preparations was a *desideratum;* the introduction of many substances in constant use, not included in the former work, and the care evinced in the preparation of the tables of volumetric solutions, the detailed account of the use of each, and of the equivalent strengths on the metrical scale, will be greeted with satisfaction; and the latter, valued as leading to the future adoption of the metrical system. The work will receive due attention at our hands, and as the consideration of its minute details requires more space and time than we can afford to give it in the course of a single article, we must defer other points to the special notice of the work that will shortly appear in our columns.

Time alone will tell whether the processes given for obtaining the various officinal preparations are of that practical nature, *capable of being worked on the large scale*, at a moderate cost, so that the manufacturing chemist may find it pay to adopt them, a merit that did not belong to many of those in the Phamacopœia of 1864.

CURRENT LITERATURE.

The Journal of Anatomy and Physiology.—The second number of this important half-yearly journal has appeared, and when we say that it equals the promise of the first, we shall be deemed to have given it sufficient praise. Edited by Professors Humphry and Newton, of Cambridge, Professor Turner, of Edinburgh, Professor Wright, of Dublin, and Mr. J. W. Clarke, late Fellow of Trinity College, Cambridge, and now Superintendent of the University Museums of Zoology and Comparative Anatomy, it could not fail to command respect, while the publishers have brought out the work in a form worthy of the renown of the staff. Besides wood-cuts, there are six first-class lithographs in illustration of the papers. There are seventeen

original communications, all by eminent anatomists and physiologists—ample reason this for not attempting to criticise or summarise them. Besides these, we have condensed reports on the progress of anatomy and physiology, and finally, a report on recent Dutch and Scandinavian contributions to these sciences by Dr. W. D. Moore, whose scholarship in these languages is a guarantee of their value. We should be glad to see all these reports occupy more space. They are of very great value.

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The Medical Press and Circular.

"SALUS POPULI SUPREMA LEX."

WEDNESDAY, MAY 15, 1867.

MEDICAL EXPERTS.

The indefatigable Coroner for Middlesex, Dr. Lankester, whose election was a great triumph for the Profession, has, in his last report, started a subject of the greatest interest, and one which calls for a careful consideration. Finding too frequently a defect in the medical evidence brought before him, he proposes no less a change in our mode of investigating the causes of death, than the creation of a class of "experts." He considers that there might very properly be attached to every Coroner's Court an expert, whose duty it should be to make all necessary post-mortem examinations and chemical analyses, and report to the jury the result of such investigation. It is but just to add that Dr. Lankester does not propose to dispense with the evidence of the Medical attendant during life, but he would have his own expert employed in addition. Now, it may be very fairly argued that, in consequence of this saving clause, the Profession would be benefited rather than injured by the adoption of Dr. Lankester's proposal. On the other hand, it may be as plausibly objected that the evidence of such an expert would be apt to over-ride that of the ordinary Medical man, and that the public would be likely to conclude that the Profession, as a body, were unfit for the simplest medico-legal investigations. There are many other arguments, both for and against the proposition, which cannot fail to be noticed. We therefore think the plan should be discussed with the utmost impartiality. The interests of the public, of science, and of the Profession, are all involved, and inasmuch as considerable difference of opinion, and even conflict of these interests, cannot fail to arise, we propose briefly to state some of the points worthy of the most serious attention, and invite the suggestions of our correspondents on the subject.

In the first place, it is undeniable that a large proportion of practitioners are either unable or unwilling to undertake the laborious and responsible work of post-mortem and chemical investigations in suspicious cases. It is no discredit to the busy practitioner, to acknowledge that he has not had time or opportunity to keep pace with the rapid advances of pathology and chemistry. Neither is it surprising that he should be unwilling to expose himself to the annoyance incidental to the position of an unpractised witness in a Court of Law. Moreover, the payments made for such purposes are so paltry, that to give evidence and make a post-mortem, is mostly an absolute loss; and it is almost undeniable that even in the public ideas on the point, delicate chemical analysis is looked upon as something very different from ordinary medical knowledge. Here, then, at first sight, there really seems a sphere for the expert, if it could only be shown that the cases are numerous enough to keep him employed, and, if the proposal should be adopted, we presume that Dr. Lankester would have a post-mortem of nearly every body on which he held an inquest. By so doing, we have little doubt that a large amount of valuable information would be accumulated.

Let us take another point. An expert attached to a Coroner's Court must obviously not be in private practice, yet he must be a skilled medical man, a first rate pathologist and chemist. These qualifications should secure a proportionate salary. He should, in fact, be paid at least as well as the Coroner himself. But who is to provide the money? Again, Who is to appoint the expert? It would be an absurdity to elect him in the ridiculous manner that the Coroner is now elected. It would be desirable that only the best men should be selected, and they must not be liable to dismissal, or where would their independence be? For this same reason they ought not to be appointed by the Coroner, nor do we think it would be desirable that one should be particularly attached to each Coroner's Court. Far better would it be for the several Coroner's jointly to elect the whole number of experts, and each Coroner divide his analyses amongst *all* the experts. For, be it observed, that the evidence of these trained men ought to be strictly impartial. The plan ought to be so worked as to lead to medical evidence being employed in our courts in the character of a quasi-judicial summing-up, rather than in the one-sided manner in which it is now too often exhibited.

At present the very name *expert* is looked upon suspiciously by the public. The most extravagant ideas prevail on the subject, and only the very highest class of men would be able to save the appointment from public distrust. This difficulty would be increased by the fact that, in most cases of foul play, the expert would be the one who first pointed out the nature of the case, and whose evidence would be relied upon by the Crown. He would, therefore, inevitably be looked upon as occupying to some extent the part of public prosecutor, and this, we think, is not the estimate in which a scientific man would prefer to be held. The prejudices of the ignorant are so strong, and so sure to make themselves felt, that it is very doubtful whether a skilled witness, whose evidence must often seal the doom of the prisoner, would not come to be regarded as a sort of professional Jack Ketch.

We have yet another suggestion or two. Are our Coroners likely to appreciate such labours as would be undertaken by these experts? We readily concede that Dr. LANKESTER himself would work his scheme as well as he has done the duties of his coronership. But we cannot, with the present mode of election, always secure a *medical* coroner at all, much less can we hope to have a LANKESTER in every district. We think, therefore, that one of the first steps towards the success of the plan would be to render all who were not legally qualified medical men, ineligible for the office of coroner. In the present state of things, we have grave doubts on the subject, and, considering how medical education is improving, are content to go on for a time in the old way.

In every case of sudden death the medical attendant ought to be summoned and paid for his opinion the usual fee. Should a post-mortem examination, with or without chemical analysis, be required, additional payment adequate to the labour should be given, and in this last case a second skilled medical witness should be associated with the first, and paid separately. The second opinion, so to speak, should be selected jointly by the medical witness and the coroner. There is little doubt that these would almost always call in an expert whose opinion would command respect. We think it not impossible that the mode we have hinted at would be less expensive and equally as efficient as the proposal we have thus far discussed, while it would contribute to a wider spread of medico-legal scientific knowledge, and be more beneficial to the Profession than the creation of a class of experts.

THE LONDON COLLEGE OF SURGEONS.

A GOOD deal of conversation in professional circles in London is at this early period being devoted to the approaching elections for the Council. The retiring members are Messrs. SKEY, KIERNAN, and WORMALD. They offer themselves for re-election, and consequently we may expect another hot contest, since the reform party in the College is determined to put an end to the routine of re-election as a matter of course.

There can be no doubt that the Fellows will be only exercising their most undoubted rights, should they reject all three of the retiring Councillors, and elect three others to the vacant posts. If we are always to go on re-electing, retirement by rotation becomes a mere farce. It would be better for the opposite extreme to prevail, and no re-election ever take place, though it might be considered that occasional re-election, in exceptional cases, could not possibly be injurious to the College. Yet it ought not to be forgotten that in every instance of a re-election, the turn of the next in order is necessarily postponed, and nothing but the real welfare of the College could reconcile him to the delay.

Mr. PRESCOTT HEWITT is the next in order, and if he will consent to be nominated his name would be a tower of strength to the party of progress. It is said that he does not like to come forward because he disapproves of canvassing, and a candidate who will not canvass may probably be defeated. This we consider to be only a further reason why he should be supported.

If the Fellows of the College possess the independence and the sincere wish for the well-being of their Profession which characterize the mass of medical men, they will not hesitate to place at the head of the poll the distinguished Surgeon who refuses to canvass. Such a course would place all future elections on a better footing, and tend greatly to raise the tone of medical ethics and the value of the College honours.

Next to Mr. HEWITT come the names of Messrs SPENCER SMITH, SIMON, and BOWMAN, all of them deserving the confidence of the Fellows. It is scarcely probable that three new names will, at the next election, be placed on the Council, and yet the movement is so natural, and the probable consequences of such importance to the Profession, that we must be prepared to witness a severe struggle for such a result.

There is another interesting question that has come to the surface through these discussions, viz. —whether it would not be a wise thing to place in the Council a Fellow *by examination*. There is no doubt that the examined Fellows may very easily command large support for such a movement, and as the Senior Fellow, by examination, Mr. LUTHER HOLDEN, is one of the most popular teachers and hospital surgeons in London, his name, if he consented to be a candidate, would alone secure many votes.

It is doubtful, however, whether such a division of strength would not lead to a defeat, in which case it would be to be regretted, for the London College continues to be the most obstructive of all our Corporations, and the one in which a large measure of Reform is most needed. Nothing but fresh blood can ever convert that College into a real benefit to the Profession, from which it derives all its influence. The question on which the Fellows are called upon to give an opinion, is not a personal one. It matters little the names of the select few who

rule in Lincoln's Inn, so long as their governments prove beneficial. But the present rulers have been tried and found wanting; they are unwilling to march with the times, therefore, in the interests of our great profession, and through it of the public, their places must be taken by men who have grown up under new circumstances and expressed new ideas.

THE CASE OF MR. T. TENNENT.

A CASE has lately been decided in Chancery which involves so many issues, that we cannot help calling attention to it.

A Mr. TENNENT, now of middle age, has, for some time past, been under restraint as a lunatic. His father, since deceased, was the first who had him confined. The exact reasons for his doing so did not transpire in Court, the only fact which came out being that he had fallen in love with a young German lady in the neighbourhood of Deal. After three years at High Beech Asylum he was removed to the Cotton Hill Asylum, which is under the charge of Dr. HEWSON. After this he resided for a time with a medical man near Dover. Lastly, in May, 1863, he went to live with a sister, where he remained, leading, according to some witnesses, a rational life, until February 24, 1866. At this last date he was, "in consequence of an act of violence," sent back to the Cotton Hill Asylum. On the 4th March following Mr. TENNENT's uncle died, leaving him a fortune, and a Commission in Lunacy was immediately issued. Mr. TENNENT was declared by this commission to be of unsound mind. Now comes the curious part of the case.

Last summer Dr. HEWSON took some of the Cotton Hill patients to the sea-side. Mr. TENNENT was one of these; and, while permitted to roam about Scarborough without an attendant, he again fell in love, and this time went so far as, without any one's knowledge, to go through the ceremony of marriage with the lady. Still Mr. TENNENT makes no attempt to escape from the custody of Dr. HEWSON. In fact, the same evening of the ceremony he returned to him as if nothing had occurred. The next stage in this singular case is that the lady invoked the Court of Chancery by a petition praying that the inquisition may be superseded, and Mr. TENNENT in the meantime enjoy more liberty. A medical man was directed to report on his state of mind, and, finding him still insane, the Court refused to interfere.

Now, there are many points in this history which might well give rise to comments of various kinds. With so imperfect a series of facts as transpired in Court, it is scarcely possible to form an opinion as to some of the most interesting problems raised by the case, and, unfortunately, we are not likely to receive much further enlightenment, since a lady who marries a man under such circumstances that he has to return to a medical guardian the same evening, will find it difficult to persuade a jury that she ought not to have entertained some fear as to the validity of the marriage contract. The collateral inquiries as to the proper disposition of the lunatic's property are, of course, of the greatest consequence to his relatives; but, we confess, that in a public point of view, the disposal of his person is of infinitely greater importance. Had the marriage ceremony in question been less precipitate, and attended with other precautions, it would have been invalid.

Yet, in a like case, where no property was at stake, how many marriages may have been effected and never questioned? and this being so, it may be worth while to inquire whether the "person of unsound mind" might not be better off under the care of a wife, than of guardians appointed by a Commission in Lunacy.

SANITARY CONDITION OF MANCHESTER.—The annual report of the Manchester and Salford Sanitary Association, with the remarks of the committee, has lately been published. It shows that the year has been "an unusually sickly one," the death-rate amounting to about 32 in every 1000 of the population. Fever has prevailed to a large extent. The deaths from this disease were 1061, being a larger number than in any previous year since these reports were first issued. It has steadily increased for the last four years; the numbers in 1863 being 399; in 1864, 469; in 1865, 861; and last year, 1061. Nearly the same fatality also has accompanied diarrhœa, the number of deaths from this cause being 1044. There is a difference, however, between these two diseases in one respect, namely, that the fatality of fever has been most marked among the poor, two-fifths of the deaths from this malady being from that class; whereas the deaths from diarrhœa were not so exclusively confined to them, as, out of eleven fatal cases, the poorest classes furnished only one. The inference drawn by the Committee from this fact is, that as a general rule in that neighbourhood, the wretched dwellings of the poor are the haunts of fever, where it takes its rise, and from which it spreads to other parts; and that when public opinion becomes alive to the evil it will insist on those "fever nests being entirely swept away."

Proceedings of Societies.

HUNTERIAN SOCIETY.

ABSTRACT OF PAPER ON THE PRESENT METHODS OF DIAGNOSIS IN AURAL SURGERY.

By J. HINTON, Aural Surgeon to Guy's Hospital.

THE author first referred to the relations existing between diseases of the ear and other general or local morbid conditions. Respecting these, he remarked that his experience had led him to believe that such relations were remarkably few, diseases of the ear being, in this respect, strikingly unlike those of the eye. Scrofula, gout, and, in a less marked degree, rheumatism, acquired and hereditary syphilis, were enumerated as general causes of ear disease; eczema and psoriasis affected the tympanum, sometimes through the meatus externus. But he had not hitherto discovered any connection between affections of the nervous system of the ear and degenerative changes of the kidney, and other internal organs. There is, however, a peculiar diathesis, with which what we must be still content (or discontent) to call "nervous deafness" co-exists; this is indicated by a peculiar aspect of the countenance, and often by a certain smoothness of the skin. The health may be in all ascertainable respects perfect.

In respect to the means of diagnosis, the author described the means of examining the meatus and membrane, giving the preference to the simple reflection of the day-light by a concave mirror, and the use of the small conical silver, or vulcanite, speculum. Among the tests for the hearing, special importance was attached to the use of the tuning-fork, and some important modes of employing it were referred to. It does not, when placed upon the head, by itself afford a sufficient test of the sensibility of the nerve, since conditions of the tympanum have a great influence on the degree to which it is heard. If, however, it be heard worse on the deaf side, presumably the nerve is implicated; if the disease be tympanic only, the tuning-fork is better heard, very often at least, if not invariably. The reason of this latter fact is that if vibrations existing in the bones of the head are prevented from escaping through the meatus, they are reflected on the labyrinth and heard more

loudly. Thus, if while a tuning-fork vibrates on the head, the meatus be closed, the sound is intensified, and the same result ensues when it is virtually closed by obstruction to the passage of vibrations through the tympanum. Or, if again this intensification of the sound, on closing the meatus be absent, obstructive disease in the tympanum may, with certain qualifications, be inferred. Further still, if a *diminution* of the sound be thus produced, it affords, in the author's opinion, the strongest presumption that the labyrinth is the seat of disease; and especially, that there is a condition of excessive tension, a state analogous to glaucoma of the eye. In many of the instances of "nervous deafness" above referred to, this inverted reaction on closing the meatus exists. By means of a double otoscope also, the relative freedom of the passage of vibrations through the tympanum on each side may be directly tested.

Lastly, the effects of removing the atmospheric pressure from the meatus, by means of the "pneumatic speculum," and those of passing air into the tympanum, were briefly described.

SURGICAL SOCIETY OF IRELAND.

FRIDAY EVENING, APRIL 26, 1867.

DR. BUTCHER, President of the College, in the chair.

CASE OF FRACTURE OF THE SPINE, IN WHICH THE OPERATION OF TREPHINING WAS PERFORMED.

By DR. HENRY TYRRELL.

SIR,—I propose this evening, with your permission, to lay before the Society the details of a case, in which I performed the operation of trephining the spine for fracture.

I shall not delay the time of the Society by an unnecessary enumeration of the opinions held by the most distinguished surgeons and physiologists on the value of the operation, for already in the pages of the *Dublin Quarterly Journal of Medical Science*, two most learned, instructive, and exhaustive articles have appeared from the pen of my colleague Dr. Robert MacDonnell, in which he has collected from the records of surgery, not only all the cases in which the operation has been performed, but also those in which its performance might have been attended with success.

Patrick Nolan, a labourer, aged 27, was admitted into Jervis-street Hospital on the evening of the 23rd of June, 1866. His lower limbs were paralyzed, he was placed on a water-bed and his urine drawn off by my resident Mr. Daniel O'Sullivan.

I saw him on the following day, Sunday, and found that his lower limbs were paralyzed, that he was unable to pass urine. On turning him on his side in the bed he experienced great pain in the back, and upon examination a visible depression was evident in the lower dorsal region, immediately above the depression the skin was abnormally prominent. He told me, that on Saturday while unloading a corn-ship in the river, he fell down into the hold about twenty-five feet, and that his back struck a beam of timber in the fall. He was rendered insensible by the accident, and upon recovering himself he discovered he was unable to move his legs, he was hauled up on deck by a rope passed under his arms, and brought to hospital on a door. Perceiving I had a fracture of the spine to deal with, I summoned my colleagues in consultation on Monday morning, when, upon a minute examination, the lower limbs were found to have some motor power, for when they were drawn up for him he could press them down slightly. The motor power was better marked in the right than the left leg. Sensibility was normal in both, he could tell when you pinched or touched him, and also distinguish between the application of heat and cold. Reflex action could also be excited. There was no doubt entertained on further examination of the back regarding the injury. There was evidently fracture with displacement forwards and pressure on the cord.

I operated at half-past five o'clock in the ward, the patient being placed on his face, and fully under the influence of chloroform. I followed the same course and used the instruments Dr. MacDonnell did, but I did not find it so easy to use the trephine as my experience in trephining the skull led me to expect. The welling up of blood from the bottom of the wound, and the depth of it, obscured the crown of the instrument so much as to render it necessary to desist after a few turns, and sponge out the wound and examine the bone with your finger-nail to see what progress had been made. However, partly by the trephine and partly with forceps, I safely removed the arches of two vertebræ without inflicting the slightest injury on the theca. The cord was evidently pressed on before, as it presented a slight convex prominence backwards; the membranes were not tense; the theca was not opened. The superficial wound was five inches long, a small piece of sponge was placed in the centre of the wound, and the ends were brought together by interrupted sutures. He was placed on his side on a water-bed, and supported in that position by large sand-bags. There was no visible improvement in the symptoms after the operation, but, on the other hand, he certainly was nothing the worse of it, although it was necessarily very tedious, occupying about forty minutes. He was ordered to have every third hour during the night a pill containing a grain of ext. belladon. and the same of opium and to take iced-milk for drink.

26th. Nine A.M.—He expresses himself as comfortable, no pain at the seat of operation; pulse 100; urine acid. He is in good spirits; sensibility of limbs good, perhaps he has more motor power, but if so it is very slight. Ordered to take one of the following pills every fourth hour until some decided effect is produced.

℞ Ext. Belladon. gr. vi. Pulv. opii gr. vi. Calomel gr. ix.
Divide in Pil vi.

Half-past seven P.M.—Passed a good day.

27th. Half-past nine A.M.—He has had a good night's rest, and is very happy and comfortable; asked for beef-tea; pupils not much dilated. Upon the introduction of the catheter he expelled the urine with great force, slightly acid; pulse 98; motor power, perhaps, improved; temperature normal; bowels confined since the accident. He was turned in the bed; ordered the limbs to be shampooed with flannel; the pills to be continued.

Half-past seven P.M.—He passed an easy day; complained of slight pain in the hip on which he lay; a slight change of position relieved him.

28th. Ten A.M.—Passed a good night, had refreshing sleep. He was conscious of the presence of urine in the bladder for the first time, and asked to have it drawn off. Pulse 104; wound was dressed with lint, wet with solution of permanganate of potash; limbs as on yesterday; scrotum slightly puffed. To have an enema of warm water.

Half-past seven P.M.—The bowels acted twice since one o'clock P.M., each time he was conscious of the movement but unable to control it; pulse 104. An angry red spot, the size of crown-piece, has appeared since morning by the side of, but not over, the great trochanter of left side; it is very sore to the touch; there was not the slightest appearance of it in the morning. I applied a lump of ice for a few minutes to the red spot with great ease to the pain. He was placed on his back with a pillow under the knees; he stated his position is most comfortable; no pain in the wound; scrotum not puffed.

29th.—Passed a good night. Bowels acted involuntarily towards morning. Removed the sponge from wound, and dressed it tightly with lint; it looks very healthy, and is suppurating moderately; urine acid; pulse 86; redness of hip not worse. Ordered the following mixture:—

Strichniæ gr. i. spt. vini. Rect. ℥ss. Aq. ad. ℥xii. ℥i. 3 tiis horis. Pulv. opii. gr. i. h. s. Sponged the back and hips with spt. vini camp., and then dusted them with starch; placed him on the right side.

Half-past Seven P.M.—Passed a good day; placed him on his back.

30th.—Had a good night. After the second dose of the strychnine he had violent muscular twitchings. Ordered it to be discontinued. The wound dressed as before with 1 oz. Per. Man. Pot.; got rice and sugar at his request for supper; pulse 88; urine acid. No alteration in the paralytic symptoms.

Half-past seven.—Passed a good day; to take an opiate at night; urine acid; placed on his side.

July 1.—Slept all night; pulse 84; wound suppurating; fluid granulations springing up at either end of it; urine acid; it flows in a full stream, and he can at will propel it with great force. Motor power of legs perceptibly increased; placed on his side.

Half-past seven P.M.—Passed a good day; to have two grains of opium at bed-hour

2nd.—Pulse 84; hips not so red; expulsive power of bladder very good indeed; appetite remarkably good; motor power of legs perceptibly stronger; he can push them from him with considerable force.

Half-past seven.—Passed a good day.

3rd. 10 A.M.—Everything going on well; had a good night. I need not mention anything further regarding his position

in bed, suffice it to say he was changed from his back to his side night and morning. Ordered to take one-sixteenth of a grain of strychnine ter in die.

Half-past seven.—No change during the day.

4th. 10 A.M.—Passed a good night; urine acid; pulse 80; wound healthy, except the inferior part, which is somewhat sloughy. Dressed as usual.

Half-past seven P.M.—Passed a good day. A spot about the size of a half-crown, of a dusky red colour, has appeared. Applied ice to it for two minutes. Galvanism caused a brisk movement of the toes. To continue the strychnine.

5th. 10 A.M.—Passed a good night; pulse 80; urine acid. Temperature of axilla and groin, taken with a centigrade thermometer, normal; hip much better; wound nearly filled with granulations; slough at inferior part not extending.

Half-past seven P.M.—Nothing to note.

6th. 10 A.M.—Passed a good night; pulse 82; urine acid. Remarked two small white ulcerations, about the size of a sixpence, but oval, on the upper part of the sacrum. As his bowels were not acted on for some days, he was ordered a calomel bolus and an injection of warm water.

Seven P.M.—Bowels acted twice during the day; he was conscious of the movement, but incapable of controlling it; back better. To have a full opiate to restrain the bowels.

7th. Ten A.M.—Passed a good night.

7th. Half-past seven P.M.—Passed a good day.

8th. Ten A.M.—Passed a good night; bowels moved twice; bladder not so tolerant; urine had to be drawn off at three A.M.; redness on right hip very considerable; his limbs are becoming flabby, they however contract vigorously under the influence of galvanism—strychnine to be given four times daily. I do not like his appearance to-day; he seems weaker; the wound is nearly filled with granulations.

Half-past seven P.M.—Passed a tolerably good day; pulse 84; urine acid.

9th. Ten A.M.—Still depressed, although he passed a good night. Ordered six ounces of wine.

Half-past seven P.M.—Passed a very bad day. After morning visit he became very weak, particularly so after the visit of some friends; his sister gave him brandy and egg mixture; he rallied towards evening.

10th. Ten A.M.—Passed a better night; pulse weak, 82; urine acid; his appearance is not so good as it has been, and yet it is hard to assign a reason for the unfavourable change. He eats, drinks, and sleeps sufficiently well, and is in no pain; the paralytic symptoms are slightly worse, as there is less sensibility in the legs, but they contract by galvanism.

Half-past seven P.M.—No change.

11th. Ten A.M.—Passed a good night; is much stronger this morning; pulse 84; urine acid, and passed with force through catheter; wound healing very well; commenced to draw the edges together with sticking-plaister.

Half-past seven P.M.—No change.

12th. Ten A.M.—Passed a good night, but is very weak; left thigh œdematous; pulse 84; urine acid; sweated profusely during the night; he has had occasional twitchings of the hands; no sensation in the legs and thighs. Omit the strychnine.

Half-past seven P.M.—No change.

13th. Although he slept well, still he is worse than on yesterday; cramps continue in the arms; sensibility of lower limbs absent.

Half-past seven P.M.—Stomach very sick during the day; ordered ℥ 2 of creasote every third hour in draught.

14th. Ten A.M.—Stomach relieved; pulse 78; urine acid; he has now incontinence of urine. I don't think he will live for many days.

Half-past seven P.M.—No change.

15th. No change; urine acid; pulse 80.

Half-past seven P.M.—No change.

16th. Ten A.M.—Urine, for the first time since the accident, alkaline; pulse 84; wound not so healthy; bed-sores forming, notwithstanding every precaution.

17th. Urine alkaline; pulse 72.

Half-past seven P.M.—Passed a very bad day.

18th. No change at either visit. He is in no pain.

19th. The left thigh is much swollen and emphysematous; quite resonant on percussion, not discoloured; no sensibility in either limbs; temperature of both the same; pulse 82; urine alkaline and purulent; although the wound is quite filled up with granulations, there is no disposition of the edges to contract.

20th.—Getting gradually worse in every respect.

21st.—Same report.

22nd.—On removing the dressing from the left hip, a gush of air attended with a loud whistling sound escaped, but still the thigh remained swollen and tympanitic.

From this date up to the period of his death, which took place on the 22nd of August, the reports of the daily visits would be of no practical importance; he grew weaker and weaker; the bed-sores spread from day to day, and, at length, from mere exhaustion, he expired without pain just two months after the accident. During the entire treatment I had the benefit of Dr. MacDonnell's constant attendance, and I must here return my thanks to my two resident pupils, Messrs. W. H. Dodd and Daniel O'Sullivan, for the assiduous and enthusiastic manner in which they carried out the treatment. Morning and evening, for two long months in mid-summer, they attended the poor patient, ministered to his every want, and, I am confident, they lengthened his life by several weeks.

Strange to say, I had to leave Dublin the day he died, and Dr. MacDonnell made a careful post-mortem examination. The ham and its membranes were healthy but anæmic; the lungs were healthy, except superiorly, where a few scattered tubercles were found; the adominal viscera apparently normal, except the kidneys, which were slightly degenerated and fatty; uretus healthy; bladder walls slightly thickened; mucous membrane inflamed; the entire cord was carefully removed at the seat of injury; it was slightly lacerated, and to a very limited extent softened; above and below this part its structure was healthy; portions of it hardened both in spirits and in chromic acid solution, and afterwards stained with the carmine solution was examined; the nuclei of the caudate cells were but feebly coloured, even after remaining some time in the carmine solution, and these caudate cells (in all parts of the cord) contained a little cloud of granular matter, probably fatty; there was no trace of meningitis.

Since the publication of Dr. MacDonnell's memoirs on the subject, the proposal has attracted much attention both in England and America, and I find in the *Boston Medical and Surgical Journal* for January 31st, 1867, a paper by Dr. Daniel W. Cheevers, in which he strongly advocates the operation. Mr. Maunder, of London, has also published a case.

In the London Hospital Reports of last year Mr. Jonathan Hutchinson, in a lecture on Dislocation and Fractures of the Spine, makes the following statement: "That a good many cases recover if put under favourable circumstances and let alone, and that of those which end in death, very rarely, indeed, can it be asserted, after post-mortem examination, that an operation could, by the barest possibility, have done any good. In the great majority, then, since it could have done no good, its effect would have been to increase the patient's sufferings and aggravate his danger." With the latter part of the statement, after reading the reports of Dr. MacDonnell, Dr. Gordon, not to mention the case now brought before the Society, no one, I think, will agree, whatever may be thought of the patients chance if let alone.

My object, sir, in reading this paper here to-night is to elicit discussion, and to hear expressed the opinions of the members of the Surgical Society of Ireland, on the advisability and prudence of the operation in selected cases, and not upon its imaginary dangers, which I hope the records of the cases operated on here in Dublin will entirely dispel.

The PRESIDENT observed that this very important question had been brought forward in a most satisfactory manner by Dr. Tyrrell. He solicited discussion upon it, and as the question, whether cases of this kind should be meddled with, was one of great importance, he thought it was their duty as practical Surgeons to express their opinions on the case.

Professor HARGRAVE said the case was a very interesting one. The first time the operation of trephining the spinal column was performed was by Mr. Cline, of London, and after that the operation was next done in Mercer's Hospital, by Mr. Reid, of this city. In that case it was an injury to the cervical portion of the column. It appeared to have been a depressed fracture, and when the sunken portion of the bone was raised the man was seized with violent spasmodic convulsions, and it required the assistance of two men to hold him down. The case terminated fatally. He did not object to the operation, but when they came to scrutinize the history of these cases they found that those who were not operated on lived for the same length of time as those who had undergone the operations. Still, that should not prevent them from operating in suitable cases. Mr. Tyrrell mentioned that the spinal cord was lacerated in his case. In trying to arrive at an exact

diagnosis of an injury of this kind they should endeavour to ascertain the way in which the accident occurred. If, for instance, a man were pitched forward on his head, and his neck bent either backward or forward, they might form an idea from that whether the cord was lacerated. If lacerated, there was an end of the case—the man must die. Mr. Tyrrell spoke of the great difficulty in performing the operation because of the hæmorrhage. Now, there was an anatomical arrangement about the spinal cord and cranium which, he thought, was not sufficiently attended to. They had in the library the magnificent plates, by Breschet, of the spinal veins, and he thought they would explain the hæmorrhage in these cases. He thought, as a general rule, that these veins were not taken into account sufficiently by operators. In the present case he thought the healthy condition of the urine for so long a time was a remarkable feature. He was afraid they had a great deal to learn in these cases, but that should not prevent them from performing the operation when they had reason to believe the cord was not lacerated.

Mr. Banon said he was present at this operation, and also at the operation performed sometime previously by Dr. MacDonnell. The great question they had to decide on was this, whether, from what they knew of the effect of operation in these cases, it afforded any chance of rendering the patients' condition better than it would have been if the operation were not performed? He was quite certain that the operation in this case did not do any harm, but he was doubtful whether, in any material point of view, it did good. If they looked at the cases that were recorded of attempts made to relieve the symptoms resulting from an injury of the spine, they would find none recorded that had proved perfectly satisfactory. Now the question was of the utmost importance whether these operations were capable of removing the symptoms. They all knew that in these cases of injuries of the spine, in the great majority of instances the injury takes place in the front of the column, and the pressure is from the front. It had been urged by those who were in favour of the operation that the removal of the posterior portion of the column removed the pressure—that it afforded the spinal column more room by removing the part against which it is supposed the spinal-marrow is pressed. He thought that was very doubtful, and he thought the operation undertaken with that view might probably do more harm than good, although, he repeated, he was quite certain it did not do harm in this case. The removal of a large portion of the spinal column must lead to increased mobility of the part of the column that was the seat of the injury, and in that case the movement of the part might tend to increased injury of the delicate spinal-cord. If they could ascertain that the injury existed only in the posterior portion of the column, in that case it would be a good thing to remove the depressed portion of bone from the spinal-marrow. They would, in such a case, proceed on the same principle as that of removing a depressed portion of the cranium from the brain; but in ordinary cases, when the injury was in front of the vertebræ, it was more than doubtful whether operations would remove the symptoms, notwithstanding that Brown-Séquard was in favour of the operation. No doubt the performance of this operation might tend to clear up the subject, and if successful would enable the surgeon to undertake operations of the kind with a well-grounded hope of removing the symptoms.

Dr. Stapleton said, so far as his opinion went, and he had seen a large number of cases of injury of the spine, it was decidedly against the operation. He had had cases under his care, which were almost hopeless, and yet they recovered. In the first place, in those cases in which there was great displacement, as in the two recent cases under consideration, where there was not only a displacement backwards and forwards, but likewise a twisting, he considered it was of very little use to operate. In the next place, he could not agree with the statement that laying bare the membranes of the spinal-marrow, cutting away the bone piece by piece, and converting a simple into a compound fracture, had no effect on the patient. He thought it had a serious influence. These two cases had what he might call almost super-human attention paid to them; they were watched day and night, and if other non-operated cases were watched as well, the patients would have lived as long. He saw a case in which there was considerable displacement. A man on one of Pickford's vans was going under an arch, an accident occurred, and his body was bent and doubled. The man lay for a long time suffering from the usual symptoms that follow pressure on the spinal cord, and he partially recovered. There was another patient who had suffered an injury of the spinal column, and who lay for months in the Hospital. Curious to say, his bladder sloughed, and the urine was discharged by the rectum. That man was taken away by his friends to the country, near the place where the late Judge Perrin lived. He recovered. Judge Perrin heard of him, and learning that he used to be carried on a man's back to a place where he was employed to break stones, he got him a small dog-cart, and in this the man used to drive into town once a week. He lived three years after he received the injury, and died of bronchitis. As to hæmorrhage, not only was there bleeding from the veins in these operations, but he had seen smart arterial hæmorrhage. He thought the giving of strychnine or of opium in these cases, was exceedingly bad practice. The proper treatment should be to quiet the patient. If the object were to avoid inflammation, why should strychnine be given, a medicine thought to determine blood to the cord. Opium was also objectionable. Belladonna should be given in these cases to quiet the system. As to galvanism, paralysed muscles will act to one sort of galvanism and not to another. If they applied galvanism in one way to Bell's paralysis, it would act; if in another way, it would not do so, but if applied through the spinal-marrow to the muscles, it would only excite the cord, and thereby do mischief. If there was an injury of the brain and paralysed limbs resulting therefrom, who would think of giving strychnine, or of applying galvanism in the early stages of these cases. Would they not wait until nature had had time to act, and the parts were healed, and then if there was functional and not organic paralysis, it would be the proper time to use strychnine and galvanism.

Dr. MacDonnell observed—It would be very interesting if they could get accurate details of Mr. Reid's case. In the case Mr. Reid operated upon, Mr. Hargrave said convulsions came on upon raising the depressed portion of the fracture. He was well aware that this was one of the theoretical objections brought against the operation, for it was supposed that the sudden escape of the cerebro-spinal fluid would bring on convulsions. But in no one truthfully recorded case had this phenomenon been observed. It would be, therefore, most interesting if the facts in Dr. Reid's case were put on record and placed side by side with the twenty-seven recorded cases in which there had been an entire absence of any convulsive symptom. It had been supposed that the convulsions occurred from the opening of the theca and the sudden escape of the fluid. Now, physiologists had repeatedly performed experiments on animals where the cord had been opened so high up as to puncture the fourth ventricle, yet no convulsion ensued. He was astonished to find in animals the amount of injury the cord would bear and recover from. At the time Brown-Séquard's pamphlet was published, he repeated all his experiments, and he was astonished to find that in guinea-pigs, rabbits, and other animals, that after the spinal cord had been injured, so as to paralyse the lower limbs—one-half of the spinal cord being divided—they recovered so completely, that, with the exception of a slight halt, one would hardly know that anything had been the matter with them. He thought the great arguments in favour of the operation, which he had warmly advocated, were based on scientific and physiological grounds, and ought to be brought forward now a days more than formerly, for we had new facts to go upon, which the old surgeons had not. At the same time it was surprising, when they looked into the records, how carefully Cline had examined into all these matters, and how accurately he was acquainted with the leading facts of what the spinal-cord would bear. Dr. Banon had suggested that there was no perfect cure effected. Why, when a man's leg was cut off he did not undergo a perfect cure; and in a great and serious operation of this kind they could only expect a partial cure. But a large percentage of the cases operated on had undergone an amount of recovery that was very considerable. In one case, in which he had been able to get some details of the patient, it was true that the man was unable to walk, but he became the father of a family, and lived seventeen years. In the case in which Dr. Gordon operated, the man recovered so much in eight weeks that he was able to walk very well. The details of that case were published at length in the "Medico-Chirurgical Transactions." He went to the iron-works at Inchicore where his (Dr. MacDonnell's) brother was an engineer, and got constructed for the man a low bench and a chair, so that he was enabled to work at his trade. That was a case of recovery so far as life was concerned. It was the first case authentically reported in this country where recovery took place. The cases in America were five out of twenty-five of the whole number of cases where recovery took place, but in these cases the details were not reported with sufficient

accuracy. If, however, they rejected these accounts, they must reject all the cases that came before them through tolerably legitimate channels, the journals published in the locality. Mr. Stapleton spoke of seeing recoveries in almost hopeless cases, and Mr. Hutchinson in his book put forward a number of similar instances. This was the same argument with which he (Dr. MacDonnell) was met by Mr. Barwell in London, when he brought forward Dr. Gordon's case. We have the assertion of Sir Astley Cooper, spoken deliberately, "that if we could save one life in one hundred, it was more than he had yet seen accomplished by surgery." They all knew that Sir Astley Cooper was not a man of wild assertions, and therefore his statement was important as bearing on the question of operations. Moreover, when he was told by Mr. Hutchinson, and his respected colleague, for whose opinion he had the greatest respect, that cases of this kind had recovered without operation, he would point to the museum shelves of Europe. How many cases were to be found of persons whose lives were saved. All knew how rare these cases were, so that the assertion of Sir Astley Cooper stands now as when he made it, that out of one hundred cases it would be a great thing to save one life. Mr. Stapleton objected to the administration of strychnine. Looking at the subject through a scientific and physiological medium, nothing could be more improper than to administer to a patient dying of inflammation any drug which would determine blood towards the organ affected. Belladonna would be the true treatment in such a case. Why then did he suggest to Mr. Tyrrell to give strychnia to the patient in this instance. The spinal cord suffered from three kinds of softening—the red inflammatory softening, the white softening, and that kind of spurious softening, which was the result sometimes of pressure. The latter kind was not an injury from which the spinal cord could not recover. In cases where the spinal-cord was in abeyance simply from pressure, where it had been squeezed, and the blood prevented flowing properly through it, he thought it right to stir it up by bringing back the circulation which had been impeded, and thereby enabling the cord to recover its functions. That which would be wrong, if there were any danger of causing inflammation, became admissible where the acute stage being passed, they had the cord with its functions lying in abeyance, by having been for some time subjected to pressure. When the nerve in the arm was pressed upon during sleep it would cause paralysis of the parts below, yet in time the nerve would recover itself when the pressure was removed; so whenever they had, as in the present case, no evidence of inflammatory action, but the functions of the cord merely in abeyance, as the result of pressure, they had a right to give those remedies which would stir up the cord even at the risk of inflammatory action. It would be seen that belladonna was given at an early period in this case.

Mr. Stokes said it was not his intention either to decry or to advocate the operation, but he desired to make a few observations elicited by the discussion which had taken place. Dr. Banon had urged two very important objections against it, and he was sorry that Dr. MacDonnell had only attempted to answer one of them. Dr. Banon said he had not seen any perfect recovery in cases of this nature, and Dr. MacDonnell replied that no one had seen a perfect recovery after an amputation; but he did not think that was a perfect analogy, for the two operations were perfectly distinct. The other objection he regarded as a more important one, and it was not touched upon at all by Dr. MacDonnell—namely, whether they could, by operating on the spine, remove the anterior pressure which produced the symptoms of paralysis. They knew that there were two kinds of pressure—one anterior and the other posterior; and that it was perfectly easy to remove the posterior pressure while the anterior pressure could not be removed at all. It was this reason which had made Velpeau and Nélaton of Paris speak so strongly against the operation as one that would not produce the benefit expected from it. It had been suggested that pressure anteriorly might occur without causing paralysis—the case of Pot's caries had been adduced as an example—but the difference was that the progress of one was slow, and the cord became as it were acclimatised to the pressure; in the other case, sets in suddenly, and could not be removed. That was the great objection to the operation.

Mr. E. Hamilton fully coincided with the observations of Mr. Stokes. He had made careful examination of every case of fracture of the spine which came under his observation in Steevens' Hospital, and they were not a few; and in all those cases the appearance which presented itself to his eye was as if the cord were pressed over a bridge rather than any displacement. Anatomy taught them that the cord lay closer to the body of the vertebræ than the arch of the vertebræ; and a considerable amount of pressure on the arch might exist without affecting the cord. He did not think it a sufficient justification of so serious an operation on the spinal-column to say that it would do no harm. He thought they should have stronger motives than this to induce them to undertake such an operation. Another point to be borne in mind was the great difficulty in diagnosis. Every injury of the cord was not accompanied by depression of the bone. There might be most serious injury caused by concussion or extravasation of blood without injury to the bone. In every case that he had seen, the cord appeared to be stretched over the bridge upon the body of the vertebræ.

Professor Hargrave stated that the only thing he knew about Mr. Reid's case was what he had heard from that gentleman himself—namely, that convulsions came on after the depression was removed. The question in these cases was to diagnose, if possible, the condition of the spinal-cord. If lacerated, of course, the operation ought not to be attempted.

Dr. Tyrrell said he was fully compensated for bringing forward the case, by the valuable observations which had fallen from the members of the Society who had spoken. While some agreed with those who said the operation was a good one, and likely to be attended with success, others were doubtful of its efficacy. With respect to the objection urged by Mr. Stokes to the operation as regards the anterior pressure on the spinal-cord, that question had been so fully gone into by Mr. MacDonnell in his late paper, that he would merely refer Mr. Stokes to it for an answer to his objection. As to the observation of Mr. Hamilton, that a serious operation of this nature was not to be justified simply on the ground that it would do no harm, he quite agreed with him in that opinion. The question was whether they might not be enabled by this operation to restore the victim of the accident to comparative health and strength, without running the risk of shortening his life. He thought that in many cases the operation would prove decidedly beneficial, and this at least could be said, that the operation, as done in Dublin and elsewhere, was not attended with the terrible consequences, that had been anticipated by some writers on the subject. The question is one deserving the gravest attention, and must still be considered to be *sub judice*.

The President said that there was one great difficulty experienced in all these cases—there was wanting the power of diagnosis to separate the cases that should be operated on from those that should not. They met with many cases in which persons might suffer a long time from an injury in the lower part of the spine, and ultimately recover and become useful members of society, without having undergone any operation. He had seen many people injured in the lower part of the spine, and their lower limbs partially paralysed, who had yet recovered in the course of eighteen or nineteen weeks. It was difficult to say whether the symptoms arising in these cases were due to effusions of blood, concussion of the spine, or depression of the bone. Because they found a paralysed state of the limbs resulting from the injury, they were not therefore to conclude that depression of the bone existed. He thought the point thrown out by so distinguished an anatomist as Mr. Hamilton, was most important with regard to the position of the spinal-marrow in the canal in which it rests, and how far the pressure was exerted by the depression, or by displacement in front by the body of the boue. They then came back again to the question with regard to the difficulty of diagnosis. In many cases where they least expected it, where there was no depression, they found the spinal-marrow torn across. This condition had been found to exist in cases where no physical sign of it was observable. There were some cases where it might be right to lift up part of the spine, but it was one of the most difficult questions in surgery to decide whether they should interfere with the case or not. The arguments used on both sides were suggestive of a great deal more on the subject, and he quite agreed with Dr. MacDonnell and Dr. Tyrrell, that there was a great deal to be learned with respect to it.

Mr. Richardson stated that the case he was about to read was sent to the Society by Dr. J. Morrison, of Newry, in whose practice it occurred.

CASE OF POPLITEAL ANEURISM CURED BY COMPRESSION.

The facts are simply these:—

Michael Larkin, aged 40, a healthy-looking stone-mason, after leaping into a dock about nine feet deep, where he was working, at Belfast, in June last, immediately felt pain and a sensation of stiffness in his right ham, which continued to annoy

him for two or three weeks, when he discovered a tumour about the size of a hazel-nut in the site of the uneasiness. From this time the pain, stiffness, and tumour gradually increased, but not to such an extent as to prevent him from pursuing his daily occupation up to the time of my seeing him—December 20th—when he presented himself for admission into the Newry Hospital.

A large diffuse painful tumour, occupying the upper part of the popliteal space, and extending under the vastus internus, was now plainly discernable; it was fully the size of the largest goose-egg; it pulsated strongly and boundingly, having a clearly-marked systolic bruit. Pressure on the femoral artery in the groin at once stopped the pulsation. The leg and foot were considerably swelled.

The characteristics of aneurism being so abundantly evident, and the system having been tranquillised by rest and the usual preparatory treatment for eight or ten days, Reid's Compressor (3rd series) was applied over the artery in the groin, and kept on at intervals as long as it could be well borne—the time of pressure averaging twelve hours in the twenty-four. The patient was a very intelligent man, and made to comprehend the course of the artery, as well as the necessity of his bearing the instrument as long and frequently as possible. He chiefly conducted the management of it himself, and for *eight* weeks had the fortitude and good sense to work with it, changing the site of its pressure from the pubis to Scarpa's angle, as the pain and irritation of the integuments prompted. At the end of a fortnight it was quite evident that the parietes of the tumour, at first very thin, were becoming more firm and dense, and that the force of its pulsation had considerably diminished. This improvement went on steadily, though slowly, for eight weeks, at the end of which time the cure was complete, all pulsation having entirely ceased, and the tumour being quite solid.

This case, I think, strongly points out the efficacy of pressure as a remedial agent in aneurism, and also that patience and perseverance in its use may often be required to effect a cure, the way to which for a length of time may seem so slow and unpromising as to lead to the withdrawal of the remedy, which, had it been steadily continued for a longer time, would in all probability have proved effectual.

Dr. Morrison finally states that he saw this man about three days since; he is well and at his work.

TREATMENT OF DISEASED BONES OF JOINTS BY THE APPLICATION OF POTASSA C. CALCE.

D. F. KIRKPATRICK spoke as follows:—

At the meeting of this Society on the 15th of February, I had the honour, Sir, of addressing some observations to you upon the subject of a new treatment of diseases of the bones and joints by the deep introduction of the caustic—potassa c. calce; combining its action with incision by means of the knife or by boring with the trochar or drill, so as to reach to and open up the very seat of the disease, into the cancellated structure in the early stage, or into the joint itself in the more advanced period.

In the year 1861, I first made trial of this treatment in cases of caries affecting the flat and superficial bones, and I have since applied the practice in disease of the sternum, scapula, the ribs, and the smaller articulations; also in every case of chronic necrosis that I met with.

In the *Dublin Quarterly Journal* for August, 1865, I brought the subject under the notice of the profession, in a short paper, and recorded some cases successfully treated by this process, and I expressed my conviction that it would be found equally applicable to the larger joints, where disease commences in the cancellated structure of their articulating extremities. I have since, sir, had the satisfaction of realizing the hope then expressed, and I shall now present to the Society a case where a perforation made through the great trochanter into the neck of the femur, was followed by immediate relief to symptoms of morbus coxæ of some months duration.

Through your kind permission I have brought this patient for exhibition after the termination of the meeting, that the members may have an opportunity of examining the case, and of observing the small amount of local irritation and the total absence of all constitutional disturbance that have attended this tunnelling into the neck of the femur.

Thomas Smith, aged 19, admitted into the Hospital of the North Dublin Union on the 1st of last January, with enlarged inguinal glands at the right side. After some days he began to complain more of pain down the thigh and in the knee than at the groin, to which he had at first directed attention, and on examination it was found that he had well-marked symptoms of morbus coxæ. Notwithstanding treatment by means of iodine, rest, and tonics, the symptoms increased; the thigh became flexed, and any attempt to straighten the limb, abduct it, or give it any extended motion, gave great pain. The usual flattening of the buttock and wasting of the muscles were manifest. Slight rotation of the head of the femur was permitted, showing that the cartilage was not yet affected, but pressure on the head of the bone could not be borne. I therefore came to the conclusion that there was inflammatory softening of the head of the femur, urgently threatening the joint; and, notwithstanding the delicacy of the patient, who was in a very hectic condition, with a pulse at 130, I decided on making a perforation through the great trochanter into the neck of the bone.

On the 22nd of March, having made the surface insensible with the ether spray, I made a circular eschar with the potassa c. calce at the lower part of the trochanter, and cutting through its centre, I used the knife and caustic alternately until I reached the bone, which I attempted to perforate with a small trochar. The compact tissue was firm and resisting, and required some force to make the instrument enter. On the three following days I deepened the canal without causing much pain to the patient. On the night following the operation he got an opiate and slept well. Next day he was not suffering, and said he was better; and on the fourth day he was able to fully extend his leg, and declared he was quite free from all pain; his sleep had returned, and the pulse had fallen to 90. His lameness has since completely left him, and he has been with difficulty kept from taking an imprudent amount of exercise. I fully expected it would have been necessary to carry the boring deeper through the neck of the femur, but such rapid and complete relief followed the formation of the short drain into the trochanter, that I ceased to insinuate the caustic deeper; and when we observe the free communication between the cancelli, as shown in this section of a femur, we can understand how an opening into the base of the neck will act as a drain and relieve all congestion above.

NOTES OF A CASE OF POPLITEAL SEROUS CYST.

(By Dr. ZACHARIAH JOHNSON, of Kilkenny.)

The case was admitted under my care in the Kilkenny County Infirmary in May, 1866.

The patient, Martin Murphy, was a healthy young man about 19 or 20 years of age. He had given the affected knee a wrench or strain some months before.

He was sent to me as a case of popliteal aneurism. An examination of the limb decided the point that it was not aneurism.

The tumour was elastic, and fluctuating. There was no pulsation. The tension of the hamstring muscles gave it a lobulated appearance.

I passed in a fine grooved exploring needle under the impression that it might be a large abscess, but, instead of pus, it revealed clear limpid serum, such as flows from a pure uncomplicated hydrocele.

I introduced a trochar, and about ten ounces of clear amber serum flowed away.

It proved to be a single cyst, although the lobulated appearance conveyed the impression beforehand that there were several. The knee at once resumed its natural size. Strapping and bandaging were applied, but the cyst gradually refilled, and tumour became as large as at first.

After some weeks I emptied it again, and now injected it with a solution of tr. of iodine in water, in proportion of ℥iii, ad. ℥viii. This caused some swelling and inflammation, which was subdued by rest and antiphlogistic treatment. It gradually refilled.

In August I emptied it again, and now injected a solution containing nearly one half tr. iodine.

This was followed by inflammtion so severe that I was alarmed least the injection had entered the joint. However, it slowly subsided under antiphlogistic treatment, and he left hospital in November last with the limb restored to its natural size, and no appearance of any tendency to recurrence of the serous effusion.

The case being one of comparatively rare occurrence, and considerable practical importance, I have been induced to contribute these memoranda in the hopes that they might prove interesting to the members of the Surgical Society.

FRACTURE IN THE SITE OF NECROSIS.

(By Dr. ANDREW NOLAN, of Wicklow.)

Colia Byrne, a girl of 19, had been affected with necrosis of the thigh for more than a year, when in attempting to show

her father "how well she could walk across the cabin floor" she fell, the bone giving way at the junction of the shaft to the head of the bone about four inches above the knee. She was immediately brought into the infirmary. She was a tall full girl, not much emaciated and tolerably well-nourished considering her situation in life (being the daughter of a labourer); the bone was completely fractured, she complained of little pain, there were three openings along the femur, one on the inner side of the thigh just at the fracture, another in the ham, and another some inches above on the inside, all discharging matter, and from which small pieces of bone had been detached. I placed the limb in a straight position, with a long outside splint from hip to foot, an inside one from groin to the knee, the limb being well padded all round, and as much as possible secured from motion, a piece of oiled-cloth underneath, and no bandages except what were necessary to secure the splints, as the discharge from the openings required daily removal. It is needless to take up the time of the meeting with further details except to say that the limb was kept as immovable as possible, nourishment of all kinds freely given, small pieces of bone from time to time came away, and at the end of seventy-two days from the 16th Dec. to the 26th Feb., the openings had closed, the bone had become consolidated, and she was able to walk out of the hospital with a firm unshortened limb.

The second case was that of a young man of 20, the son of remarkably healthy parents, small well to do farmers. He had the dark dirty-looking skin, black hair, and eyes of those in whom you meet the worst forms of scrofula. He had had necrosis of the left tibia for some years, now however healed, and necrosis of the right thigh upwards of a year, when, in attempting to move about, the limb snapped across above the knee as in the former case. I saw him two days after the accident, he was a good deal wasted from the previous discharge and night sweats; there were three openings in the course of the femur, covered with large flabby granulations, one particularly in the ham, all interfering very much with the application of splints. However, by hollowing the latter out over the sores, I was enabled to secure the limb from motion by the splints and padding; the discharge was considerable and required daily removal. I was unable to see the patient oftener than once or twice a-week; however, he was carefully attended to by his mother, he had abundant nourishment, porter, cod-liver oil, &c., supplied him, but it took five months to consolidate the limb, and before all discharge ceased and all sequestræ separated. He has now a useful limb about an inch and a-half shorter than the other, and his general health completely restored.

Though such cases are very likely to occur, I have never seen any recorded; when, therefore, the first case came before me I viewed it with much anxiety. Its successful issue prepared me for the second and much more formidable case. Both show the wonderful recuperative power in the system, but as they entail such prolonged suffering to the patient, and such incessant care and trouble to the surgeon, I think we should in every case be careful to warn our patients of the possibility of such accidents.

THE PRESIDENT'S ADDRESS.

Gentlemen,—As we have now arrived at the close of our annual session, it becomes my duty, as your President, briefly to review the history of our Society for the past year, and to sum up, as clearly as I can, the main results of your labours during that period.

Whether we regard these results absolutely in themselves, or compare them with those which have been achieved in former sessions, I think we have, upon the whole, good reason to congratulate ourselves on the retrospect.

The interest felt in the welfare of the Society by the members of the profession has continued unabated. The activity and vigour which have eminently marked its operations since its first foundation have suffered no diminution. The spirit of earnest enquiry, of honest search after truth, of simple-minded desire to enlarge the domain of science, by rendering more definite and complete the knowledge already attained, and adding new contributions to the stores already accumulated. This spirit, I am happy to say, has continued to be the motive power, and the guiding principle of our association. To the attainment of these great ends, and to the promotion of these higher purposes, its labours have been directed, and to these supreme objects all minor interests and considerations have been rigidly subordinated.

A healthy vitality pervades every department of its administration, and everything promises that its future career will be attended with the same success, and be productive of the same usefulness which have marked its course hitherto. I shall enumerate the communications made and papers read at the several meetings of the Society.

On December 7th Mr. Richardson exhibited a specimen of stricture of the male urethra. The contraction was situated a little anterior to the centre of the canal, and, remarkable to say, there was no other stricture in the canal. Mr. Fleming described the particulars connected with a case of compound dislocation of the astragalus forwards and upwards, unaccompanied by fracture of either tibia or fibula. Also a case of dislocation of the femur on the dorsum of the ileum, occurring in a little girl, aged seven years, and which was reduced by manipulation.

Mr. H. G. Croly made some observations upon congenital luxation of both wrist-joints—viz., luxation of the radius and ulna forwards on the right side, and backwards on the left side; and in the same subject luxation of the head of the right fibula, which he also thought congenital.

Mr. Stapleton described the particulars of a case of dislocation of the thumb reduced by manipulation.

January 4th.—Mr. Edward Hamilton exhibited a cast of a femoral hernia of unusual size, and made some observations on the case of the patient from whom it was taken.

Mr. Fleming exhibited a number of calculi passed by the urethra. He also showed an interesting specimen of "primary" cancer of the kidneys, together with a tumour of the prostate gland.

Dr. Macalister described the particulars regarding some interesting specimens of anomalies of the vascular and muscular systems.

January 18th.—Mr. Wharton exhibited a specimen illustrative of compound comminuted fracture of the bones of the leg near the ankle-joint. There was also dislocation upwards of the four outer tarso-metatarsal bones, at the tarso-metatarsal articulations, and fracture of the same bones near their distal extremities. Primary amputation of the leg was had recourse to.

Dr. H. G. Croly made some practical observations on acute glossitis, illustrated by seven cases.

Dr. Barton made some observations on a case of scald of the glottis.

February 1st.—Dr. Macalister exhibited a large thyroid body, which had a scirrhus appearance and feel. He also exhibited and described some rare muscular abnormities in the forearm. Mr. Porter exhibited Blandin's knife, and pointed out the advantages of the instrument for slitting the prepuce in acute phymosis. Dr. Leech exhibited a salivary calculus, which he removed from Wharton's duct, and Dr. Macnamara, E. Hamilton, and Mapother, were appointed a committee to examine and report upon its chemical nature.

February 15th.—Dr. Mapother read the report of the committee appointed on the 1st of February to analyze the nature of the salivary calculus presented to the society by Dr. Leech.

Dr. F. Kirkpatrick made some observations in advocacy of the treatment of certain diseases of the bones of joints by the use of potassa c. calce applied to the diseased bones.

Dr. H. G. Croly read the history of a case of acute glossitis.

Mr. Richardson read the report of a case in which the intestines protruded through an abdominal wound, and which ended in recovery. The case occurred in the practice of Dr. Zachariah Johnson of Kilkenny, and the report was sent by him to Dr. Richardson for communication to the Society.

March 1st.—Dr. Davys, of Swords, presented to the Society a specimen of fibro-cellular tumour, which recurred in the site of the cicatrices of former operations, for the removal of similar tumors; the specimen exhibited that evening was the fourth recurrence of the disease in the same situation.

Professor Hargrave exhibited the larynx of a man who died with symptoms of laryngitis, a very fetid abscess existed at the posterior part of the cricoid cartilage, which was stripped of its immediate investments, and seemed to be necrosed. Tracheotomy had been performed and appeared to give some transient relief.

Dr. Edward Hamilton exhibited a stump, the seat of recurrent aneurism after amputation of the thigh for popliteal aneurism.

Mr. Tufnell exhibited a gutta-percha urinal, which he had constructed of peculiar form for a gentleman who was unable to relieve himself without its assistance.

Dr. Fleming exhibited a drawing of an irreducible hernia of a large size; and also a drawing of a large hydrocele of the

neck, which was unconnected with the thyroid gland, was pyriform in shape, very moveable, and contained a large quantity of cholestrine.

March 15th.—Dr. Edward Hamilton gave the particulars of a case in which he performed Symes' operation at the ankle-joint. He exhibited the bones of the tarsus, all of which were diseased.

Mr. Fleming made a communication on the accidents occasioned by the introduction of foreign bodies into the urethra in cases of stricture, and exhibited two specimens to illustrate his subject. He also exhibited three calculi which he removed from the bladder by lithotomy, and detailed the particulars of the cases in which he operated.

Dr. Persse White exhibited the intestines of a man, who died in the Meath Hospital of a bayonet wound, inflicted on the lower part of the abdomen. The intestines were wounded in several places, and signs of peritonitis were evident. Dr. Persse White drew the attention of the Society to the case of a boy, in whom stillicidium urinæ followed the operation of lithotomy, and had persisted for a period of six years.

March 29th.—Dr. Butcher, President of the College, made some observations on the lateral operation of lithotomy, and illustrated his views by the details of a case upon which he had operated that morning. Dr. Banon read the account of a case in which he performed ovariotomy. He likewise exhibited the cyst which was of a very large size.

Dr. John Barker exhibited a large melanotic growth from the neck of a calf, and demonstrated the structure of the tumour under the microscope.

I have just briefly alluded to the headings of these valuable contributions to practical surgery—being fully aware that each paper, with the discussion upon it, is most accurately recorded in The Medical Press and Circular for the last six months. To it I refer every gentlemen present. The truthfulness and validity of each communication has been most sedulously watched over by your honorary secretaries and by your publication committee, and hence I abstain from any remarks on the important facts brought to light; on conclusions established; ideas suggested; errors corrected; and lines of investigation struck out. There are desiderata still remaining, both in theory and practice, which will afford this Society, and kindred ones, ample work for recurrent sessions. I am sure, gentlemen, you will all unite with me in admitting how deeply we must feel indebted to the two honorary secretaries of this Society for all the trouble they have taken, and the energy they have displayed in promoting our views and securing our success. The one, the learned Professor of the Practice of Medicine in this College, connected with this Society, as one of its honorary secretaries, from its infancy; the other for many years, and taking the place of Bellingham, whose intimate union with its best interests I adverted to on opening this session. The indefatigable exertions of Mr. Richardson I can bear testimony to, from being associated with him on the publication committee for many years. His gentle, forbearing manners, and the acumen which he possesses on all medical subjects, have peculiarly characterized him for the honourable position which he has so truly benefited us by accepting. Having now taken a rapid retrospective glance at our labours during the past session, it only remains for me, in conclusion, to express my heartfelt sense of the high distinction which it has been my lot to attain in occupying this chair, which has been already filled by so many men of whom our profession is justly proud. The recollection of this epoch in my professional life shall be treasured up among my most cherished memories. It will, I trust, bind me more closely to those whose friendship it is my best privilege to enjoy; and it will certainly stimulate me in my efforts to co-operate, to the utmost of my ability, with those who are seeking to maintain and transmit unimpaired the reputation which our great national schools of surgery and medicine have achieved, through the labours of the illustrious men who have departed, and of equally illustrious contemporaries who still continue to adorn and shed a lustre on our ranks.

After the meeting was adjourned by the President, the members examined a patient of Dr. Kirkpatrick's, into whose great trochanter some potassa c. calce had been inserted by that gentleman. The boy walked into the room, and did not appear to suffer any inconvenience from the sinus made by the caustic.

TREPHINING THE SPINE.

LETTER FROM PROFESSOR HARGRAVE TO MR. RICHARDSON REGARDING MR. REID'S CASE.

"Upper Mount-street, May 4th, 1867.

"Dear Richardson,—In reference to the statement which I made at the Surgical Society, held April 26th, on the operation performed by Mr. Reid in Mercer's Hospital, for trephining the spine, which was, to a certain degree, doubted by some of the members,

"I have called since that date on Mr. Reid, who has furnished me with the following facts in support of my statement:—

"The patient was a Swedish sailor, who, in some drunken brawl on George's-quay, or in some of the adjoining streets in this city, fell from a considerable height on the back of his head and neck, and was brought into Mercer's Hospital paralyzed in the extremities. As he lay on his back the slightest rotatory motion of his head to either side threw his whole frame into strong convulsions; on examination, a depression in the lower part of the cervical spine was well-marked.

"Mr. Reid diagnosed a depressed fracture of the 3rd or 4th cervical processes; he decided on operating, so as to elevate or remove the depressed portions of bone; when they were exposed it was found that the transverse processes of the 4th cervical vertebra were driven into the spinal canal. On the endeavour to elevate and remove them the spinal-cord was occasionally compressed, instantly followed by violent spasms of the entire body, alone controlled by the presence of two strong assistants; the depressed portions of bone were elevated and removed, the wound dressed, and the patient placed in his bed.

"The good result of the operation was immediate in one respect—namely, the patient could rotate his head freely from side to side, without *any spasm* or *convulsion* being followed by that motion; he survived the operation in comfort for six days, and then expired. As I observed, when alluding to this case, Mr. Cline, of Guy's Hospital, was the first to perform this operation of trephining the spine; and my friend, Mr. Reid, the second, as far as my knowledge of the history of my profession enables me to decide. This case was treated in Mercer's Hospital about forty years since, and has lost none of its interest; no doubt but the admission of the patient can be found in the records of that institution. No post-mortem was made. I may add that, many years since, I had under my care Mons. Beaujean, a professor of gymnastics, who, in performing the feat of what was called "the pole," was flung from a height of ten feet, with great violence, on his occiput, and was taken up paralyzed in his entire system, except the head and face; he survived the accident seven or eight days. The post-mortem examination exhibited partial luxation of the bodies of the 5th and 6th cervical vertebræ, the oblique processes of the 6th fractured, and the cord corresponding to the lesion was *lacerated perpendicularly* to the size of a split-pea.

"It affords me much satisfaction to be able to record this very interesting case of Mr. Reid's, and to observe that he was the first in Ireland to perform this operation, which, in one respect, conduced so much to the comfort of the patient.—Believe me, yours affectionately, William Hargrave.

"B. Wills Richardson, Esq.,
"Hon. Surg. Sec. to the Surgical Society."

OBITUARY NOTICE.

M. JOBERT.

We have briefly to notice that the funeral solemnities of this renowned surgeon were celebrated at the Madeleine Church, in Paris, on the 26th of last month. As is usual with men of eminence in France, a large concourse followed in the procession, composed, amongst others, of the representatives of all the learned societies to which M. Jobert belonged. Besides the religious services, it is customary for friends of the deceased to pronounce addresses over the remains. This was done by several of the members of the learned societies who were present, and who paid a high tribute to his attainments and his memory. He had achieved a reputation from a comparatively humble sphere, but, notwithstanding his celebrity, he appears to have been subject to habitual depression, even melancholy, which eventually ended in mental disorder, and he spent the last two years of his life in the private asylum of Dr. Blanche, who was formerly his pupil, and who paid him the kindest attention down to the hour of his death.

Medical News.

ROYAL COLLEGE OF SURGEONS OF EDINBURGH.—The following gentlemen passed their final examinations, and were admitted Licentiates of the College, during the recent sittings of the Examiners:—

Andrew David Barrie, Madras; Titus Cumins Crooker, Canada West; William Alexander Finlay, Edinburgh; James Gairdner, Crieff; Walter Bayne Geikie, Edinburgh; Edward Heyns, Co. Clare; Charles Holden, New Brunswick; William Hunter, Kilrea, Ireland; Alfred William Lupton, Wakefield; James M'Ilroy, Bushmills, Ireland; Robert Shand Turner, Banffshire.

FACULTY OF PHYSICIANS AND SURGEONS, GLASGOW.—During the recent sittings of the Examiners, the following gentlemen passed the final examination of the Faculty:—

James Conolly, M.D., Galway; R. F. W. E. Goedicke, London; James W. C. Grant, Aberdeen; William Jameson, Manchester; Henry Knowles, London; James Ogilvie, Glasgow; Thomas K. Salter, London; John Vance, London.

The following passed the first professional examination:—

William J. W. Cetchell, John Mackinlay, Alexander C. Moffat, and James Robertson, of Glasgow; Samuel A. Payne, of Manchester.

The following gentlemen passed the final examination for the Double Qualification granted conjointly with the Royal College of Physicians of Edinburgh:—

William H. Armitage, Glasgow; William H. Belcher, Cork; William Belcher, Dublin; B. R. Boast, Glasgow; Edward Curse, Edinburgh; Joseph H. Hill, Glasgow; Edwin Hollings, Glasgow; John Kershaw, Manchester; Hugh J. Lloyd, Glasgow; William L. Muir, Glasgow; Thomas Tinley, Glasgow; Henry E. Trestrail, Glasgow.

The following passed the first examination for the Double Qualification:—

Thomas Richmond, George W. Johnstone, Edward P. Edwards, Duncan C. Milboy, James G. Beasley, James P. Cunliffe, Burnard W. Wellings, Adam Wilson, Richard Lougher, William Stephen, James Kelly, and George R. Atkinson, of Glasgow; James H. Fletcher, of Manchester.

APOTHECARIES' HALL, LONDON.—On April 25th, 1867, the following Licentiates were admitted:—

Edward Dyer, Clerkenwell; William Hubert Holmes, Cork; Thomas Frederick Hopgood, Chipping Norton; Ernest George Thomas Llewellyn, Witheridge; Thomas Richardson Loy, Stokesby, Yorkshire; George Pavey, Edmonton; William Edmond Richardson, Rochdale.

At the same Court, the following passed the first examination:—

Henry Arthur Allbutt.

ROYAL COLLEGES OF PHYSICIANS AND SURGEONS, EDINBURGH: DOUBLE QUALIFICATION.—During the recent sittings of the Examiners, the following gentlemen passed their final examinations and were admitted L.R.C.P. and L.R.C.S. Edin:—

John Alexander, Caithness-shire; William Munden Allan, Newfoundland; Alfred Bennison Atheron, New Brunswick; Eli James Barrick, Canada West; John Brosnan, Kerry; Samuel Brown, Jamaica; John Cascarden, Ballintra, Ireland; Richard Vooght Clampitt, Devon; John Kerr Davidson, Caithness-shire; William Easby, Durham; David Edgar Jones, Cardiganshire; John Leader, Co. Cork; John M'Rae, Ross-shire; Robert Stevenson, Kilwinning; Thomas Todhunter, Whitehaven; Francis Vacher, London; Thomas Richard Vaux Woodifield, Sunderland.

The following also passed their first professional examinations:—

John Dewar, Glasgow; William Mackie, Glasgow; John Gillies, Skye; Enoch Davies, South Wales; John Sayer Bridgford, London; William John Cuthbert Ward, Lanchester, Durham; George Watters, Caithness; William Gowans, Prestonkirk; David James Hamilton, Falkirk; William John Campbell, Poonagh.

ROYAL COLLEGE OF SURGEONS OF ENGLAND—The following gentlemen were admitted Members of the College, on May 7th:—

Reginald Bayley, Nailsea, Bristol; John Gulley Blackley, Manchester; Samuel Hamilton Cartwright, Old Burlington-street; Charles William Chapman, Dalston; Edward Fluder Chinery, Lymington, Hants; Ernest Thomson Raimbach Evans, Jersey; Benjamin Franklin, Liverpool; Joseph Gabe, Merthyr Tydfil; Henry Walter Gostling, Oakley, near Bedford; James Robert Haynes, Clipstone-street; Thomas Frederick Hopgood, L.S.A., Chipping Norton; Henry Edward Juler, Shepherd's Bush; Walter Maine, Barnstaple, Devon; Charles Henry Newstead, Royal General Dispensary; James Cornelius O'Grady, Bombay; Frederick Morrish Pierce, Higher Broughton; Thomas Henry Pinder, Whitley; Robert Longuet Sheffield, L.S.A., Mile End Road; Frederic Walter Smith, Brenchley, Kent; James Walker, Leeds; George Thomas Willan, Bourne, Lincolnshire.

On May 8th—

James Brown, Dudley Port; Louis Charles Achille Carre, Bath; Henry Case, Box Moor; Henry Cheesman, Lewes, Sussex; Matthew Owen Coleman, Surbiton; Alexander Paull Fiddian, Bridgend, Glamorganshire; David Owen Fountaine, Stoke Hammond, Bucks; Charles Grindrod, Liverpool; Thomas Richardson Loy, L.S.A., Stokesley, Yorkshire; Henry Widinham Maunsell, Dublin; Samuel Edwin Solly, Savile Row; Alfred Steward, Wolverhampton; George Stokell, L.R.C.P.Lond. & Edin., L.S.A., Hobart Town; John James Swindell, Finchley; Joseph Wharton, Oldham; John Greaves Wiseman, Ossett, Yorkshire; Edwin Woodward, Birmingham.

On May 9th—

Messrs. William Edward Stevens, Pewsey, Wiltshire; Charles Lewis, Blackheath; and James Thorne, Jersey, students of Guy's Hospital; Thomas Flower, Codford, St. Peter, Wiltshire; and William Wilberforce Smith, Haverstock-hill, of the Middlesex Hospital; Henry Mann Fothergill, Newcastle-on-Tyne; and Walter William Spencer, Liverpool, of the Newcastle School; John Earp Burton, Lic. Fac. Phys. and Surg., Glasgow, Liverpool, of the Glasgow School; Richard Albert Shipman Prosser, Birmingham; William Edmund Cant, Colchester, of St. George's Hospital; John Williams Pring, Festiniog, North Wales, of the Dublin School; Charles Wilson Milne, Wandsworth, of St. Thomas's Hospital; George Fisher, Baytry, Yorkshire, of the Leeds School; and Oliver Penfold, Blackmoor-street, of King's College. It is stated that only seven candidates out of the 59 who presented themselves for examination failed to acquit themselves to the satisfaction of the Court, and were consequently referred to their hospital studies for the period of six months.

ROYAL INSTITUTION OF GREAT BRITAIN.—At the last General Monthly Meeting, Sir Henry Holland, Bart., M.D., D.C.L., F.R.S. President in the Chair, Professors John Tyndall, Esq., LL.D., F.R.S., Edward Frankland, Esq., Ph. D., F.R.S., were re-elected as Professors of Natural Philosophy and Chemistry. The Presents received since the last Meeting were laid on the table, and the thanks of the Members returned for the same.

NOTICES TO CORRESPONDENTS.

THE ADULTERATION OF HONEY WITH SUGAR.

TO THE EDITOR OF THE MEDICAL PRESS AND CIRCULAR.

SIR,—Having recently purchased a quantity of honey, from which the comb (now in a much broken state) has not been thoroughly removed, will you inform me how I can ascertain if it has been adulterated with sugar. It does not contain starch.—I am, Sir, A. H.

[The correct modes of determining this point, viz.—1. By its action upon Fehling's solution; 2. By the rotatory power before and after inversion—are too difficult and complicated to be of any use except in the hands of an experienced chemist. However, an idea may be found by pressing a small quantity of the suspected honey between two pieces of glass, and examining it with the microscope. The crystals of dextroglucose (the main constituent of honey) form opaque, granular, hemispherical, or cauliflower-shaped masses, whilst cane-sugar forms well-defined monoclinic prisms, with hemihedral faces—a large form of which is seen in sugar-candy. It should be borne in mind, however, that "cane-sugar," in small quantities, is a normal constituent of new honey, but is gradually converted by keeping into dextroglucose, &c. If the point to be determined is of importance, "A. H." should have the honey examined by an Analytical Chemist.—ED. M. P. & C.]

Births, Marriages, and Deaths.

Announcements are inserted without charge, and must in all cases be authenticated with the signature of the sender.

BIRTHS.

MARTIN.—On the 21st ult., at Crawley, the wife of T. H. Martin, M.R.C.S.E., of a daughter.

PEARSE.—On the 29th ult., at Botesdale, the wife of Arthur Pearse, M.D., of a daughter.

ALDERSON.—On the 2nd inst., the wife of Frederick H. Alderson, M.R.C.S.E., of Grove-terrace, The Grove, Hammersmith, of a daughter.

BARNETT.—On the 2nd inst., the wife of Dr. H. C. Barnett, of Milford, of a son.

MARRIAGES.

CAMPBELL, SCROGGIE.—On the 24th ult., at Beechwood House, Laurencekirk, Alex. C. Campbell, M.B., L.R.C.S.E., &c., of Laurencekirk, to Agnes, second daughter of the late David Scroggie, Esq.

M'COY, RUSSELL.—On the 30th ult., at the Parish Church, Westbury-on-Trym, Robert W. M'Coy, L.K.Q.C.P., &c., of York, Western Australia, to Geraldine Jane Loftus, second daughter of the late Christopher Russell, M.D., of Enniskerry, Co. Wicklow.

DWANE, CLANCY.—On the 30th ult., at the Church of S.S. Peter and Paul, Cork, by the Very Rev. T. W. Croke, D.D., P.P., V.G., Doneraile, assisted by the Rev. W. Fitzgerald, C.C., Dr. Thomas M. Dwane, L.R.C.S.I., Cloyne, to Delia, daughter of the late Samuel Clancy, Esq., Charleville, and niece of Timothy Murphy, Esq., of Amiens-street, Dublin.

DEATHS.

LAWTON.—On the 7th ult., at his residence, St. Philip's-road, Sheffield, S. Lawton, M.R.C.S.E.

WEST.—On the 1st instant, at Alford, Lincolnshire, Bennet Langton, the youngest child of Dr. R. Uvedale West, aged 14 years.

WOOD.—On the 1st instant, at Penge, Surrey, after four weeks' acute suffering, Reginald, the youngest son of Charles G. Wood, Surgeon, aged 4 years.

WILLIAMS.—On the 3rd instant, John Williams, Esq., of Stanthill, Dursley, Gloucestershire, and of Fynnonwen, Peterstone, Glamorganshire, aged 67.

STADDON.—On the 4th instant, at Friar's-road, Ipswich, Lizzie Alice, the only daughter of J. H. Staddon, L.R.C.P.Ed., M.R.C.S.E., aged 1 year.

Lectures.

THE METROPOLITAN WATER SUPPLY.

A DISCOURSE

DELIVERED AT THE

ROYAL INSTITUTION OF GREAT BRITAIN,

MARCH 29TH, 1867.

By Dr. E. FRANKLAND, F.R.S.

PROFESSOR OF CHEMISTRY IN THE ROYAL INSTITUTION.

ANOTHER attack of the most terrible epidemic to which modern London is subject has once more called earnest attention to the serious defects of the Metropolitan Water Supply. The origin and spread of cholera is confessedly still involved in much obscurity, but the experience which we have derived from four visitations leads irresistibly to the conclusion that, whilst no successful barriers have been devised against the introduction of the disease into this or any other country, cholera can never establish itself as an epidemic unless the water supply of a community be tainted with organic impurity; thus Manchester suffered fearfully from cholera in 1832 and in 1849, whilst supplied with impure water; but after the introduction of pure water from the Derbyshire Hills, the return of the disease in 1854, and again last year, manifested itself in Manchester by a few sporadic cases only, although in other respects Manchester is one of the most unhealthy towns in the United Kingdom.

The violence of the epidemic, as Dr. Farr has shown, exhibits also a close relation to the *degree* of sewage contamination of the water supply. Thus he has demonstrated that in the visitation of 1849 that portion of the metropolitan population which was supplied by water taken from the Thames at Kew, suffered a mortality from cholera of 8 in 10,000. Of every 10,000 people supplied with water taken from the river at Hammersmith, 17 died. Of the inhabitants in Belgravia, St. George's, Hanover-square, Chelsea, and Westminster, supplied with water taken below Chelsea Hospital, 47 in 10,000 died. Whilst the populations drawing their supply still lower down—viz., at Battersea, and between Hungerford and Waterloo Bridges, where the river was still more foul, suffered to the extent of 163 in 10,000. In the year 1854 one-half of this latter district was supplied by water taken above Teddington Lock, and the deaths fell to 87—little more than one-half; whilst last year, when the whole supply was drawn above Teddington Lock, the loss of life was only 8 in 10,000.

The water withdrawn from the Thames is now all taken above Teddington Lock, and its filtration before distribution is rendered compulsory by the Metropolitan Water Act of 1852. The wisdom of thus withdrawing the water at a higher point, and of enforcing its filtration, is evidenced by the comparatively slight mortality from cholera last year in those districts supplied with Thames water. Far different, according to the Registrar-General, was the fate of that portion of the metropolis which had the misfortune to be supplied from a reservoir at Old Ford, belonging to the East London Water Company. The suddenness and virulence of the outbreak of cholera in the East of London last summer at once aroused the suspicions of the Registrar-General, who requested me to make an immediate investigation into the East London Water Company's supply. I found the reservoirs at Old Ford to be situated close to the River Lea, which is there little better than an open sewer. The chief reservoir is also sunk sixteen feet beneath the low ground, which is there only just above the level of spring-tides; consequently, the water in this reservoir is always below Trinity high water-mark. I pointed out that soakage from the adjacent foul river, and from the surrounding soil saturated with sewage, must take place into such an excavation, with its floor of 2½ acres in extent, an opinion which has been confirmed by a recent investigation of this reservoir when emptied, as far as possible, by pumping. The mortality from cholera in that portion of London supplied from these reservoirs was frightful; for, whilst the deaths in the districts drawing water from other sources varied from 2 to 12 in 10,000, they ranged from 63 to 111 in 10,000 in those districts supplied from Old Ford.

PRESENT METROPOLITAN WATER SUPPLY.—London is, at present, supplied with water by nine companies, who deliver about 108,000,000 gallons daily. Some idea may be formed of the vastness of this supply by a comparison of its volume with some well-known magnitude. If it were contained in a reservoir having a floor area equal to that of Westminster Hall, the walls would require to be carried to the height of 1070 feet or more than three times the height of the Victoria Tower, to enable it to contain the water which is daily distributed in the metropolis. Five of the water companies abstract about one-half of the total supply from the Thames, two withdraw about 42,000,000 gallons from the river Lea, and the remainder is pumped by two other companies (the Kent and South Essex Companies) from Artesian wells sunk into the chalk of the Thames basin. Such is the present volume of water daily supplied to London and its suburbs; what will be the amount required twenty years hence it is difficult to estimate, but if the annual rate of increase since 1850 be continued, it can scarcely be less than 150,000,000 of gallons; for, in 1850, the gross daily quantity delivered was only 44½ millions of gallons, in 1856 it had reached 81,000,000 of gallons, whilst in 1865 it was 108,000,000 of gallons.

PROPOSED WATER SUPPLY OF LONDON.—Notwithstanding the best efforts of the water companies, the present supply of water to the metropolis is far from satisfactory, owing to causes which are mostly beyond the control of those to whom that supply is entrusted; it is therefore contemplated either to change entirely the source of supply, and thus obtain water of greater purity than any available in the neighbourhood of London, or so to alter the conditions at present affecting Thames water as to materially improve its quality. For this purpose no less than five schemes have been recently brought forward, viz:—

1. Sources of the Severn—proposed by Mr. Bateman.
2. The Cumberland Lakes—Messrs. Hemans and Hassard.
3. Thames Water, filtered through Bagshot Sands—Mr. Telford Macneill.
4. Storage Reservoirs near the Sources of the Thames—Mr. Bailey Denton.
5. Derbyshire and Staffordshire Hills—Mr. Remington.

The last three of these schemes have scarcely yet assumed a shape for discussion from a chemical point of view, we shall therefore confine our attention to the first two.

MR. BATEMAN'S SCHEME.—Mr. Bateman proposes to obtain the metropolitan water-supply from the mountain ranges of Cader Idris and Plynlimmon, in North Wales, which constitute the chief sources of the Severn. These mountains rear their heads into the moist air brought from the Atlantic by the prevailing south-westerly winds, and receive the precipitation of from 70 to 150 inches of rain per annum. We should thus avail ourselves of a great natural and very active distillatory apparatus, furnishing water of great purity. These Welsh hills consist of the Upper and Lower Silurian formations, "which yield water as pure in quality as that of Loch Katrine, and which afford sites for magnificent reservoirs, which may be constructed with perfect safety and facility, and of sufficient capacity to economize the full annual rainfall I have assumed, and to last out droughts of from 140 to 150 days' duration, both for town supply and river compensation. One of these districts of 66,000 acres in area, is situated a little to the east of the range of mountains of which Cader Idris and Aran Mowddy are the highest summits, forming the drainage-ground of the Rivers Banw and Vyrnwy; the other district of about equal area, is situated immediately to the east of Plynlimmon, 2500 feet in height. The discharge-pipes of the lowest reservoir in each of these districts will be placed at an elevation of about 450 feet above the level of Trinity high water-mark. The water will be conducted by separate aqueducts of 19 miles and 21½ miles in length respectively, to a point of junction near Martin Mere, from whence the joint volume of the water will be conveyed by

a common aqueduct to the high land near Stanmore, where extensive service-reservoirs must be constructed, which will be at an elevation of at least 250 feet above Trinity high water-mark. From these reservoirs the water will be delivered to the city at high-pressure, and under the constant supply-system. The total distance from the reservoirs on the Severn to London will be 183 miles. One of the reservoirs on the River Vyrnwy will, by an embankment of 76 feet in height, form a lake of five miles in length, and will contain 1,089,000,000 cubic feet. Another on the River Banw, by an embankment of 80 feet in height, will form a lake of four miles in length, and contain 940,000,000 cubic feet; and a third in the same district, by an embankment of similar height, will contain 732,000,000 cubic feet. Amongst the reservoirs on the Severn will be one which, by an embankment of 75 feet in height, will contain 2,230,000,000 cubic feet—this single reservoir being 50 per cent. greater than the available water in Loch Katrine." Mr. Bateman estimates the cost for 220,000,000 gallons per day at £10,850,000, the interest upon which, together with cost of maintenance, &c., would be met by a domestic rate of 10d. in the £, and a public rate of 2d. in the £. The present rate paid to the London water companies is much heavier, being about 1s. 5d. in the £. The total gathering ground in Mr. Bateman's scheme is estimated at 204 square miles.

Messrs. Hemans and Hassard's Scheme.—This scheme lays under contribution the magnificent condensing surface of the Cumberland and Westmoreland mountains, where, as every tourist knows, rainless days are rare exceptions. The extent of gathering-ground would be 177 square miles, whilst the average annual rainfall in the district is 100·56 inches. The districts from which water is proposed to be taken lie on the northern slopes of the range of hills towering over Grassmere, Windermere, and Kendal, and draining into the Rivers Lowther and Greta, and into the lakes of Haweswater, Ullswater, and Thirlmere. This scheme has the advantage of naturally-formed reservoirs, which would, however, require to be further enlarged by embankments; and these natural advantages are also to some extent counterbalanced by a greater length of conduit (280 miles), and by the necessity for several tunnels, two of which would be respectively 7¼ and 8 miles long. The daily delivery of water in London would be 250,000,000 gallons, and the cost of works, &c., £13,500,000. The interest upon this capital, cost of maintenance, &c., and compensation to present water companies, would be met by a rate of 1s. 1d. per £1.

From a chemical point of view, it is at present quite impossible to give the preference to one or the other of these colossal schemes, both of which are truly worthy of the latter half of this century of engineering triumphs, and of the great city on behalf of which they are projected. Before we can appreciate, however, the advantages of such magnificent undertakings, it is necessary that we should first consider the chemical quality of our present supply, and compare it with that of the water which would be obtained from these new sources.

Analysis of Potable Waters—Quality of the Present Metropolitan Water Supply.—Absolutely pure water is never found in nature. In addition to mechanically-suspended impurities which can be mostly removed by filtration, potable waters also contain various solid substances in a state of solution. These substances are left behind as a solid residue when such waters are evaporated to dryness; they have been commonly classified by chemists under the three following divisions:—

1. Matters which are expelled when the solid residue is heated to redness in contact with air.

2. Matters which are not expelled at a red heat, and which decompose soap.

3. Matters which are not expelled at a red heat, and which do not decompose soap.

The substances of the first division consist of—

(*a.*) Organic matter.

(*b.*) The products of the decomposition of certain mineral salts, chiefly nitrites and nitrates.

Formerly ammoniacal salts, a certain amount of moisture, and even hydrochloric acid, were amongst the products expelled on ignition, but since the adoption of the suggestion of Hofmann and Blyth in the year 1856, to add a known weight of carbonate of soda to the water before evaporation, these substances have been excluded from category No. 1, and it is important to bear this in mind when comparing the analyses of water made prior to 1856 with those which have been made since that year. Notwithstanding the more definite character, however, thus given to the matters expelled on ignition, it is still difficult to interpret the meaning of this loss. It may all arise from organic matter, nay, there may even be more organic matter in the solid residue of a water than is indicated by the total loss on ignition, as I have recently had occasion to observe—or it may be all due to the dissipation of mineral ingredients, the result however of the decomposition of previously existing organic matter. When it is large it throws suspicion upon the character of the water, it indicates either the presence of organic matter, animal or vegetable, or it denotes previous contamination with sewage or decaying animal matters. This analytical determination is thus surrounded with much uncertainty, and it has always been considered, as indeed it deserved to be, highly unsatisfactory. Hence the attempts which have been made to indicate directly or indirectly, by means of permanganate of potash, the amount of real organic matter involved in this loss by ignition. Permanganate of potash when dissolved in water readily yields oxygen to many substances capable of combining with this element. Thus, if it be added to water, acidulated with sulphuric acid, and containing oxalic acid in solution, the latter is completely and rapidly converted into carbonic acid and water at the expense of oxygen derived from the permanganate, and it is found that one part by weight of oxalic acid, in being thus oxidised, abstracts almost exactly eight parts by weight of oxygen from the permanganate, the latter being converted into sulphate of manganese. In undergoing this chemical change the rich violet colour of the solution of permanganate of potash vanishes, and it is thus easy to ascertain by the non-disappearance of the characteristic tint of the permanganate, when the oxidation of the oxalic acid is complete. Now, a similar disappearance of colour occurs when the solution of permanganate of potash is added to an acidulated sample of potable water containing organic matter, and it has been assumed that, as in the case of the oxalic acid, the organic matter contained in the water is completely oxidised by the permanganate, which was thus thought to indicate the amount of oxygen required to oxidise completely the organic matter contained in the water. Dr. Letheby has even employed this reaction for the estimation of the *actual weight* of organic matter contained in a known volume of water, on the assumption that every grain of organic matter contained in a sample of water, robs the permanganate solution of eight grains of oxygen. Such a method of ascertaining the actual amount of organic matter in a water, or even the amount of oxygen required to convert this organic matter into its final mineral products of oxidation would be invaluable, on account of the extreme facility with which it can be applied, and it was, therefore, not without a certain amount of regret that, after employing this process for many months, I noticed unmistakeable symptoms of its untrustworthiness, symptoms which were amply confirmed on submitting the process to rigorous experimental tests. By the addition of known weights of different organic substances to equal volumes of pure distilled water, the latter was artificially contaminated with a known proportion of each kind of organic matter. In fact, each sample of water thus artificially contaminated contained three parts of organic matter in 100,000. I then proceeded to ascertain first the amount of oxygen which this organic matter abstracted from the permanganate of potash, and secondly, the actual amount of organic matter present in the water, on the assumption that each part by weight of organic matter consumed eight parts by weight of oxygen from the permanganate of potash. The same test was also applied to another sample

of distilled water from which all organic matter was carefully excluded, but to each 100,000 parts of which three parts of nitrate of soda were added. The importance of this last experiment will be evident when it is stated that nitrite of soda is rarely absent from the different waters supplied to London. The amount of oxygen consumed by the organic matter was determined for two different periods of time, viz.—first, for a period at the end of which the acidulated and contaminated water remained tinted with permanganate for ten minutes after the addition of the latter, and secondly, for a period of six hours, during the whole of which time the permanganate was present in excess.

The results are contained in the following table where they are compared with the known amount of organic matter present, and the known amount of oxygen which that organic matter would require for its complete oxidation:

1 Name of substance, 3 parts of which were contained in 100,000 parts of water.	2 Oxygen absorbed in ten minutes. (Experiment.)	3 Oxygen absorbed in six hours. (Experiment.)	4 Oxygen required to oxidise organic matter. (Calculated.)	5 Amount of organic matter present. (Calculated from column No. 2.)	6 Amount of organic matter present. (Calculated from column No. 3.)	7 Amount of organic matter actually present.
Gum Arabic.....	·0102	·0350	3·55	·082	·280	3·0
Cane Sugar.....	·0064	·0152	3·37	·051	·111	3·0
Starch.....	·0143	·0302	3·55	·114	·241	3·0
Gelatin.....	·0792	·1836	6·76	·634	1·469	3·0
Creatin	·0080	·0172	6·59	·064	·138	3·0
Alcohol.....	·0093	·0164	6·26	·074	·131	3·0
Urea.....	·0092	·0119	6·40	·074	·095	3·0
Hippuric Acid..	·0328	·0600	5·90	·262	·480	3·0
Oxalic Acid.....	·3747	·3750	·38	2·998	3·000	3·0
Nitrate of Soda	·6910	·6913	0·00	5·528	5·530	0·0

From this table it is seen that of the nine kinds of organic matter operated upon, only one was completely oxidised by permanganate of potash, even after the lapse of six hours, whilst, it will be remarked, that urea, hippuric acid, and creatin—three organic substances likely to be present in water recently contaminated with sewage—suffer an oxidation which, even in the most favourable case, only reaches 1-100th of complete oxidation ; whilst, if we attempt to calculate the amount of these substances present in the water, from the quantity of oxygen so absorbed, instead of finding 3 parts of each in 100,000 of water, we obtain only ·138 part of creatin, ·095 part of urea, and ·480 part of hippuric acid. On the other hand, the mineral salt, nitrite of soda, weight for weight, surpasses every form of organic matter experimented upon, in the avidity with which it absorbs oxygen ; and 3 parts of this inorganic substance in 100,000 of water, would actually, by the mode of calculation above described, indicate no less than 5¼ parts of organic matter. Thus, it is evident, that for the estimation of the amount of organic matter in water, or the quantity of oxygen necessary to oxidise that organic matter, permanganate of potash is utterly untrustworthy and fallacious. Whilst, however, this reagent is quite worthless for the quantitative estimation of organic matter in water, it may still be used in certain cases as a qualitative test, where there is no opportunity for accurate analytical examination. Thus, if a clear and colourless water decolourizes much of the permanganate solution, the water ought to be rejected for domestic use, as being of *doubtful* quality, for although such a water may be absolutely free from organic impurity, yet its decolourizing action upon the permanganate would indicate, with considerable certainty, that the water had been in contact with decaying animal matters. Should the water, however, instead of being colourless, be tinged of a yellow or brownish yellow colour, when looked at through a considerable stratum, as in a decanter, for instance, its capability of decolourizing a considerable amount of permanganate solution, ought not to be regarded with the same suspicion as in the case of a colourless water, because the yellow tint of such waters is generally owing to the presence of peaty matter which, though innocuous, has the power of decolourizing permanganate of potash.

Having thus convinced myself of the fallacy of the permanganate process of analysis, and there being no other method by which the estimation of organic matter in waters can be even approximately effected, I have, for some months past, in conjunction with my pupil Mr. Armstrong, been endeavouring to remedy this grave defect in water analysis, and we have at length succeeded in replacing the unsatisfactory item of "organic and other volatile matter" by certain precise and definite determinations, which throw great light upon the present condition and previous history of the sample of water submitted to analysis.

The most important things to be ascertained about a water used for domestic purposes are, first the amount and character of the organic matter present in the water at the time of analysis ; and, secondly, the amount of hardening or soap-destroying materials which the water contains. Unfortunately, the first of these data cannot be ascertained, but we have devised processes by which the amount of the two most important elements of organic matter, carbon and nitrogen, can be determined with considerable precision. For this purpose, the following processes are necessary :—

1. Determination of the carbon contained in the organic matter. To distinguish this carbon from that which is contained in the mineral carbonates present in most waters, I will term it *organic carbon.*

2. Determination of the total combined nitrogen. This nitrogen may exist in the water in one or more of the three following forms :—*(a.)* As a constituent of organic matter —*organic nitrogen* ; *(b.)* as a constituent of mineral nitrites and nitrates ; *(c.)* as a constituent of ammonia.

3. Determination of the nitrogen present as nitrites or nitrates.

4. Determination of ammonia.

5. Calculation of amount of organic nitrogen. This is obviously a very simple operation, for if, from the amount of total combined nitrogen (determination No. 2), there be deducted the amount of nitrogen present, as nitrites and nitrates (determination No. 3), plus the amount of nitrogen present in the ammonia (determination No. 4), the remainder will be the amount of organic nitrogen.

The processes by which these determinations are made, will be fully described elsewhere.

(To be continued).

CLINICAL LECTURES

DELIVERED IN

STEEVENS' HOSP TAL,

TOGETHER WITH

OBSERVATIONS ON PRACTICAL MEDICINE.

By Sir HENRY MARSH, M.D., Bart.,

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REFLECTIONS ON THE CAUSES OF DROPSY.*

BEFORE I proceed further in the consideration of the hemorrhages it will be expedient to dwell as succinctly as possible upon that variety of extravasation which I have formerly termed the white blood hemorrhage, or, in other words, dropsy or hydrops, so called from the resemblance which the uncoloured extravasation derived from the serum of the blood bears to water. In this there is more an appearance than a reality of divergence from my original subject.

In the year 1846 I published in this Journal some remarks upon chlorosis and hemorrhage, with the view of contrasting the one with the other, and also of contrasting the red blood and the white blood hemorrhages. The word

* Reprinted from the Dublin Quarterly Journal of Medical Science, Vol. xvi. August 1, 1853.

hemorrhage is applicable to both because both are derived from the blood.* I also remarked upon some of the pathological differences between chlorotic and hemorrhagic blood, the first low in density and in the proportion of red corpuscles; the second, ere yet reiterated hemorrhages have thinned and debased the blood, abnormally exalted in density, superabundant in red corpuscles, and deficient in fibrine.

It is now my purpose, that the subject of the hemorrhages may be rendered more clear, to make a few general remarks upon the causes of the white blood hemorrhages, or dropsies. To expose my views on this subject I shall speak of dropsy under three distinct heads: atonic dropsy, obstructive dropsy, inflammatory dropsy. There are few of the dropsies which we daily meet with in practice that will not find a befitting place under one or more of these heads.

By atonic dropsy I mean all those dropsical effusions which are the results of pre-existing morbid or febrile action,—of wasting and softening of the solids, of degeneration of the blood, and consequent atonicity of the vascular tissue.

By obstructive dropsy I would imply all those dropsies which result from organic disease of the heart, lungs, liver, spleen, &c.; and from tumours and other morbid growths which mechanically obstruct the circulation,—such obstruction causing the blood to stagnate in and to distend the venous trunks and capillary system, so that they become surcharged, and are compelled, if I may so say, to seek relief by a serous extravasation. When I reach this part of my subject I shall have occasion to show that obstruction is frequently not the sole cause of the white blood extravasation,—that more than one cause is influential.

By inflammatory dropsy I mean all those dropsies, and they are many in number and variety, which owe their origin to serous inflammation. This most important branch of my subject will require hereafter to be fully explored.†

The red blood hemorrhages, as I have elsewhere noted, are naturally and practically divisible into the passive and the active. No two varieties of the same disease can be more diverse in causality and treatment—where the cases are well marked—than are the active and the passive red blood hemorrhages. The same observation is strictly applicable to the white blood hemorrhages or dropsies. The atonic hydropic effusions represent the passive red hemorrhages? the inflammatory, the active:—the parallel is perfect. Between the passive and active dropsies there are some remarkable discrepancies which may just be glanced at. In the passive or atonic the effusion takes place usually towards the close of prolonged chronic diseases,—it is one of the latest and most fatal indications: whereas in the active or inflammatory, serous extravasation is often synchronous with the first signs of morbid action. This is particularly remarkable in the anasarca of albuminuria.‡

In the passive or atonic the extravasation is generally first perceived in the most depending parts, commencing slightly and gradually, ascending from below upwards, invading the infracutaneous serous tissue, and ultimately the serous tissue of the cavities. But such is not ordinarily the course of active dropsy.

There is another very remarkable difference between these distinct varieties, viz., that which relates to the density of the extravasated fluid. In the passive or atonic dropsy it is, with not many exceptions, exceedingly thin and fluid; it consists, in fact, of the thinnest serosity,—only the most watery parts of the blood are exhaled. A proof of this is derivable from the slight degree of pressure needful to produce a pitting or indentation, and the rapidity with which the pitting or dimple is obliterated, and the fluid replaced; and in extreme cases, the transparency of the skin shows the fluidity and clearness of the subjacent extravasation; whereas generally in acute anasarca the effused fluid is more opaque, dense, firm, and resisting; a heavier pressure is required to produce a dimple; the dimple or pit is more slowly effaced. In some cases the fluid productive of anasarca is so thick and glutinous, that it requires much force to displace it, and, being displaced, very slowly is the smoothness of the skin restored. So great is the density sometimes, that even in those parts of the body where the cuticle and cutis are thinnest and softest, scarcely any amount of pressure can cause an impression; and thus we have presented to us that which I shall have occasion to dwell upon hereafter, viz., the anasarca dura,—a very interesting variety of anasarca. It belongs to the inflammatory section of dropsical effusions, and shall there be treated of. There results from the density and tenacity of the effused fluid another and conclusive test, viz., acupuncture. In the passive dropsy the tenuity of the fluid enables it to escape through the punctures freely and copiously, and in a stream. In the active, it escapes slowly and unwillingly, or, in some cases, not at all; consequently these are cases in which acupuncture is absolutely fruitless.

Such are, in a general way, some of the signs which in well-marked cases distinguish the active and passive varieties of dropsy.

Between the extremes of the thinnest serosity and the densest white blood exudations, the gradations are numberless, and often imperceptible; they pass insensibly from the one into the other. In all animated nature, when extremes approach, the lines of demarcation are oftentimes inappreciable. This, in disease, is as true as in the various kingdoms of organized nature; and therefore it is necessary, in the study of disease, to arrive at just conclusions by the contemplation of clear, distinct, and well-defined cases.

There is another distinction between active and passive dropsies which just occurs to my mind. In passive dropsies, the effused fluid is, with few exceptions, unmingled with the red corpuscles of the blood; they are rarely suffered to escape. In active or inflammatory exudations, the admixture of red corpuscles is of far more frequent occurrence. Why this should be the case, and what the true nature of serous inflammation is, I will endeavour to expose when the inflammatory dropsies shall be treated of.*

The great interest which attaches itself to the careful study of white blood abnormal extravasations is derived, not only from therapeutic considerations, but also from the vast variety of pathological changes both in the fluids and solids which give origin to this frequently ominous symptom.

In reviewing the causes of passive or atonic dropsy, the clearest perceptions will be obtained by a brief statement of the facts of a few expressive cases. This symptom sometimes springs from a morbid change in the blood alone; sometimes from the more formidable source of organic visceral disease giving rise to a morbid change in the blood. When chronic visceral disorganizations terminate in dropsy, I have known as much terror excited in the patient's mind by the first appearance of œdema in the insteps and ankles, as there is by a sudden attack of profuse hemoptysis.

Œdema of the feet and ankles is often first distinctly perceived at bed-time. In the recumbent position the thin fluid diffuses itself through the areolar tissue. In the morning it has apparently vanished, but towards night the dreaded symptom re-establishes itself. When the patient resumes the sitting position, the fluid gravitates downwards, and the patient finds his legs again swollen, and thus his fond and vain hopes are dissipated. Great indeed is the popular dread not only of the appearance, but of the

* Between the red blood and the white blood hemorrhage there is this difference, that the former is an extravasation of the blood in its entirety, whereas the latter is one of only certain portions of the blood, either not mingled at all, or but in a small degree mingled with red corpuscles.

† Many of those dropsies to which the epithet encysted is by some writers applied, will find a place under this head.

‡ I use the word "albuminuria" because, whilst it points to a specific disease, it implies not a theory, but a fact.

* The true cause of the infra-cutaneous extravasation which takes place at the *commencement* of renal anasarca is, I am persuaded, to be traced to serous or albuminous inflammation affecting the infra-cutaneous serous tissue; an inflammation precisely of the same nature as, and in all respects analogous to, that which affects the kidneys.

very name, of dropsy, and there is no disease more dreaded than that popularly called water on the chest.

The following fact, which I noted twenty-seven or twenty-eight years ago, impressed itself strongly at the time upon my mind, and I have often since in my lectures recurred to it as an exemplification of the passive or atonic dropsy without organic lesion.

A gentleman, thirty-five years of age, having been not more than three weeks recovered from maculated fever, performed in a remarkably easy carriage, and in summer, a journey of about fifty miles. The fever was one of the most formidable character, the undoubted offspring of contagion, so dangerous that at one time his medical attendants abandoned all hope of his recovery. At an early stage of the disease he was bled from the arm to ten ounces; subsequently so urgent were the cerebral symptoms that he was largely and repeatedly leeched. His skin was universally and darkly maculated; the fever was a protracted one; scarcely before the twenty-first day could it be said that it had quite subsided; the period of convalescence was painfully protracted by extensive sloughing of the nates. When the sores were healed, and strength somewhat reinstated, he travelled fifty miles from the city, and on reaching the end of his journey, he complained of stiffness in the joints of the lower limbs. The drawers and stockings were with difficulty removed. He was very much shocked and alarmed to find his limbs, as high as the hips, immensely swollen, and pitting everywhere on the slightest pressure; the scrotum and penis were also much distended.

The functions were all healthily performed; urine perfectly natural; bowels regular; no sign whatsoever of organic lesion, only he was pallid in the extreme, and greatly reduced in flesh and strength. Mild medicine, tonic and diuretic, pure bracing air, improving appetite and diet, wrought in this gentleman a miraculous and speedy change for the better. After the lapse of a few days the dropsy was so far subdued that he was enabled to take quiet walking exercise in the open air, which seemed to have the effect of promoting absorption. The improvement of the general health, and the subsidence of the dropsy, moved together "*pari passu*;" no long time elapsed ere restoration was perfected. He is now in robust and vigorous health; never before nor since has he shown the slightest tendency to any form or variety of hydropic effusion. During the fever I remained constantly with him, and accompanied him in his journey. I was then a tyro, but at the time and often since I have thought that had he been less profusely bled, he might have been spared the extreme debility and the sloughing.

This example appears to me a good illustration of dropsy as a result of the wasting and softening of the tissues without organic lesion of any of the solid viscera.

There were in this case a prolonged and dangerous fever, and a tedious convalescence.

(To be continued.)

CLINICAL LECTURE ON STONE.

By JOHN ADAMS,

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THERE is often difficulty in deciding whether a patient had better be cut for stone, or whether it is not preferable to break up the stone in the bladder, as in the operation of lithotrity. No doubt the latter operation is preferable when circumstances are favourable, but the same may be said of any operation. The subject is, however, now so well understood that it is unnecessary to say much about it, although, even now, some surgeons are in favour of the old operation of cutting in all cases, and decline to adopt the opinion expressed by Sir Benjamin Brodie, that lithotrity is the operation for stone and lithotomy the exception.

I show you some debris of stone which a patient voided after repeated crushings, and by which he was eventually completely cured. The patient was a gentleman, 72 years old, and suffered under the ordinary symptoms of stone. The case was one of unusual facility for operation. The bladder, although irritable, was able, under a slight, administration of chloroform, to hold a few ounces of water; the urethra was large, and the stone was soft and visible, so that a large quantity of phosphatic matter was readily withdrawn by the scoop lithotrite repeatedly introduced at each sitting. He was scarcely confined to his house during the various operations, and was able to go about his usual business, which required a great deal of walking. The fragments are of great size, and he had very little difficulty in getting rid of them *per vias naturales*.

It is, however, in cases where the stone is large and hard, that lithotrity is inadmissible, and lithotomy must be resorted to. But it is not my intention to go into the whole history of cases of stone, and to consider a subject on which so many surgeons delight to dwell. I want to direct your attention to cases which are of very frequent occurrence, cases unfortunately within the experience of most surgeons, in which it is better not to operate at all, rather than incur the risk of destroying the patient at once by the performance of the operation of lithotomy. Certainly there are many cases in which the suffering of the patient is so great that death is less to be dreaded than a continuance of life, and the surgeon is inclined, or is even solicited, to operate, by way of attempting something which may, perchance, relieve his patient. Such operations are almost invariably futile and terminate unsuccessfully, and should, in my opinion, be avoided. But I admit the difficulty in coming to such a conclusion, and I am always too glad to adopt any suggestion at variance with this opinion, provided the patient's sufferings justify me in this respect; but I have long since ceased to advise an operation where the prospects of success are at *nil*.

In the museum of the College of Surgeons there is a stone which weighed over forty ounces. The operation of lithotomy was commenced by Mr. Clive senior, but the attempts at its removal were futile, and the patient, Sir Walter Ogilvie, died almost on the operating table. No attempt ought to have been made to remove this stone, which, in consequence of its size, could not have passed through the pelvis. However, as the argument is *ex post facto* it is scarcely worth all the consideration to which it would otherwise have been entitled. At any rate the removal of such enormous calculi should never be attempted.

Two cases of stone in the bladder occurred to myself some years ago where, from the size of the stone in each, and from the obvious disease of the entire urinary apparatus, no attempt at removal was deemed advisable, and the patients gradually sank with no extraordinary amount of suffering.

Mr. Coulson, in his valuable book on "Lithotrity and Lithotomy," has collected from various sources, cases of very large stone successfully removed by operation; but it may be generally stated that stones exceeding twelve ounces in weight can very rarely be successfully extracted after cutting.

A friend of my own, advanced in years, was cut by the late Mr. Key, assisted by Sir Benjamin Brodie, but the stone was so large that it could not be extracted, and the patient died immediately after his removal to bed. Such cases must have occurred to most surgeons of experience, and it has frequently happened that the patient has run the gauntlet of all the bystanders in the operating theatre, and yet no force could remove the stone owing to its great size, notwithstanding large incisions were made on both sides of the prostate gland.

But to what do my observations tend? Simply to this, that in very many cases of stone no operation by cutting should be attempted; and that, if lithotrity fails to effect a cure, such cases should be let alone, and life, which may often be prolonged, should be made easy by suitable medicinal and diatetic measures. My remarks are especially applicable to persons of advanced age; for in these, as the stone increases in size, it ceases to roll against the neck of the bladder, and thus the greatest cause of irritation is gone; besides, the prostate is often large in such cases, and this also keeps the stone from coming in contact with the sensitive *cervix vesicæ*.

A gentleman, whose case is familiar to me, has been the subject of stone in the bladder for many years; his age is between 70 and 80, and his life seems likely to be prolonged even much further; he remains in the recumbent posture either in bed or on the sofa, and all irritation is either prevented by this position, or is subdued by opium.

Three years ago a gentleman, 80 years of age, consulted me about a constant passing of bloody urine, accompanied by an irritable state of the bladder. I sounded him and found a stone. I advised that an attempt should be made to crush it by lithotrity. He declined to have any operation performed. I ordered him some henbane and liq. potassæ, and on calling on him in the country the summer before last, I found that he had gone out from home, and was told that he was in a comparatively comfortable state, and had little or no suffering. I have recently heard from his surgeon that he suffers little or nothing from the stone, except an occasional attack of hæmorrhage.

A patient nearly 80 years of age was brought to me last year with symptoms of stone. I sounded him and found a large stone. I introduced the lithotrite, but could not grasp the stone owing to its size. He declined any further attempts at operation. He is now in comparative health, but he is obliged generally every night to draw his water off, and by this means he keeps himself in comparative comfort.

A gentleman was brought to me from the country by his surgeon with stone in the bladder. His age was 72, and he was a comparatively healthy man, and suffered little, and when quiet at home in the recumbent or sitting posture, felt no inconvenience. I could not seize the stone with the lithotrite in consequence of its size. I advised that no operation should be performed, but that he should keep himself quiet. I ordered him henbane and potash. I have reason to believe that he is now in comparative ease, having undergone no operation whatever.

I should be exceedingly sorry to attempt to dogmatise on such slender experience as I have had in cases of this description, but I am anxious that surgeons should, in such cases as I have referred to, pause e'er they advise an operation, which, under such unfavourable circumstances, would be almost necessarily fatal, and to try whether life may not be rather prolonged by palliative treatment. Of course, my observations may be met by counter-statements of other men of larger experience who have operated on persons of advanced age, and have successfully removed very large calculi from the bladder: it is rather the indiscriminate use of the operation that I take the liberty to object to, being satisfied that death must almost of necessity be the result of operative interference. But I admit that it is almost impossible to lay down any rules to regulate our practice in many unfortunate cases. Much must be left to the prudence and discrimination of the surgeon.

It is not only that the size of the stone in old persons forms a fatal objection to lithotomy, but there are many other serious complications which should deter us from the performance of an operation which is attended with material danger, however dexterously performed. Thus, the discharge of pus with the urine, accompanied by emaciation and hectic albuminuria to any extent, the mixture of blood and pus, and intense pain in the bladder, indicative of ulceration of this viscus, may be mentioned as almost invariably prohibitory of lithotomy.

No doubt, in many cases, as the stone increases in size the symptoms diminish, a fact which admits of easy explanation; and if the ordinary symptoms are mitigated, it follows almost as a necessary corollary that those effects—more remote, but, perhaps, of more importance—are also diminished. Thus, inflammation of the bladder subsides, the ureters resume their original healthy condition, and the kidneys, if not already damaged, continue to discharge their wonted and important functions. I admit that such a consummation is scarcely to be expected; but the occasional persistence of comparative health under such a serious complication, as a large stone in the bladder, justifies a hope that life may be prolonged without any very great suffering.

A case was related to me last week which proves two things bearing on the subject now under our consideration. A gentleman, 70 years old, had had stone in the bladder many years, the size of which was such, that no operation was deemed advisable in his case. The symptoms gradually diminished, and he suffered little or nothing. One day he fell back suddenly, and he felt something give way in his bladder; inflammation of this viscus commenced; urgent symptoms occurred, and he soon sank under their effects. There can be no doubt that in this case the stone, which had been originally fixed, was dislodged by the concussion, and thus became a source of fatal inflammation to the bladder and kidneys.

The treatment to be followed in such cases may be very briefly described, and consists of—1st, rest, as much as possible in the recumbent position; 2ndly, the hip-bath; 3rdly, the administration of alkalies and henbane; 4thly, opiates in moderation; 5thly, the employment of the catheter occasionally, and if the pain in the discharge of the urine is excessive and followed by painful spasm of the bladder, an elastic catheter may be retained in the bladder to allow the urine to dribble away; attention to the bowels, and simple, but not abstemious, diet should also be enjoined.

Irrespective of the surgical aspects of cases of stone in advanced age, and under serious pathological conditions, a case may assume very great importance in other respects. I may illustrate my position by reference to a case well known to many surgeons of this metropolis. A gentleman between 70 and 80 years of age, had stone in the bladder. His sufferings were not acute, and no operation was advised, or, if advised, was not assented to. His life was heavily insured, and, by the articles of insurance, he was entitled to a large quinquennial bonus if he lived beyond a certain day. He outlived the specified time, and his family thereby received a very large addition to the original policy at his death. What would have been the case had he submitted to the operation of lithotomy? Certainly, he might have recovered, but the chances would have been, in my opinion, much against him.

Hospitals for Calculous Diseases.—I cannot help thinking that those philanthropic men who appear to be so earnest in advocating the necessity for special hospitals, would do some real good to society if they would erect an institution for the admission and treatment of such cases as are beyond the powers of the ordinary surgeon—I allude to such cases of stone in the bladder as do not admit of relief by the operation of cutting or lithotrity—we might thus have the means of judging how long life might be prolonged, and pain mitigated, by careful treatment. We should then possibly be spared the immense mortality in stone operations—a mortality obviously materially enhanced by the too frequent performance of lithotomy when cases are positively hopeless.

Whilst these remarks have been passing through the press, I have seen the observations on stone, by Mr. Cadge, of the Norfolk and Norwich Hospital. The cases have most forcibly struck me as essentially corroborative of my opinion, and deserve the most careful reading, as proving, rather more than I have attempted to prove, that even lithotrity cannot always be advocated in advanced age, when there is reason to believe that the bladder and kidneys are much diseased.

EXTRACTED FROM THE "LONDON GAZETTE."—WHITEHALL, APRIL 18, 1867.—The Queen has been pleased to grant unto John Simpson, of Castle Lodge, in the parish of Knaresborough, of Dore House, in the parish of Handsworth, both in the west riding of the county of York, and of Gloucester-place, Portman-square, in the county of Middlesex, Esquire, doctor in medicine, and in the commission of the peace for the said west riding, her Royal licence and authority, that he and his issue by Elizabeth Simpson, his wife (who is the sole heir and representative of her maternal uncle, Andrew Hudleston, late of Whitehaven, in the county of Cumberland, doctor in divinity, incumbent of Whitehaven, and rector of Bowness, in the said county of Cumberland, deceased), may take and henceforth use the surname of Hudleston in lieu and instead of that of Simpson, and bear the arms of Hudleston.

Original Communication.

ON PEMPHIGUS.

By JOHN HUGHES, M.D.,
PHYSICIAN TO THE MATER MISERICORDIÆ HOSPITAL.

(Read at a Meeting of the Medical Society of the College of Physicians.)

Patrick Morrin, aged 11, a healthy-looking boy, with brown hair and eyes, a good complexion, and apparently well nourished, was admitted into Mater Misericordiæ Hospital Feb. 7th, 1867. He is a very intelligent lad, and states that both his parents are alive and healthy, and that he has never suffered any privations. He lived in Smithfield in a well ventilated house, and had an abundant supply of food and good clothing. He states that although he could have animal food twice or three times a-week, yet he preferred and mainly used, farinaceous diet. He always enjoyed good health until the commencement of his present attack, which occurred on the 3rd inst. On that day (Sunday) he went to the Park, where he engaged in a game of foot-ball, became very warm and perspired a great deal; he then sat on the grass to cool himself, but did not feel chilled.

In the evening, after he returned home, and during the night he was very thirsty, and drank water several times out of a vessel where it had remained some days, and which tasted badly; he was obliged to do so, because the usual supply was cut off from the house on account of the bursting of the pipes in the preceding frosty weather.

4th inst.: Next morning he went to his usual work—viz. (cleaning a cattle yard); still felt thirsty, and drank copiously of the same water.

5th inst.: On this day he was pretty much in the same state; hardly well enough to do anything, yet not ill enough to remain in bed, but still thirsty and drinking the same quality of water until evening, when he had a *shivering fit* for the first time, and felt worse than before; he was restless and slept badly during that night, and when he awoke the following morning he noticed two pimples, as he calls them, on the outside of the right thigh; the larger one being about the size of a sixpence, and one on the outer side of left thigh something smaller. They all burst in a short time by the rubbing of his clothes, and felt very sore. Others were making their appearance on various parts of his body; and as he was very sick, and feared he might communicate the disease to his brother, with whom he slept, he applied for admission to the hospital the day after the eruption manifested itself. Having been received after the usual visiting hour, he was not examined until the next day, Friday, the fifth day of his illness, and the third of the appearance of the eruption, which was then beautifully marked.

The original bullæ were destroyed by friction, and an excoriated surface marked their site: one was an inch in diameter, and others were developed on the thighs, down to the knees; thinly scattered; but over the neck, anteriorly and posteriorly, a crop was appearing, which promised to surround it like a collar, as it eventually did by the coalescence of the bullæ.

Next day (sixth day), still more bullæ were appearing on the front of the chest, on the back, and a few scattered ones on the arms. On Sunday (seventh day) the eruption seemed to be fully developed, and it might be observed in every stage of its progress, and on every region of the body. No part escaped except the hands (both surfaces) and the soles of the feet, the scrotum, and penis. The bullæ were not equally numerous everywhere; but where they were thinly spread they attained the largest size. For instance, we measured one two inches in diameter on the outside of the thigh, and one equally large near the umbilicus; on the arms, also, they were very large, and they were, all of them, single bullæ; while on the back, and around the neck, they were smaller in dimension, and quickly coalesced, owing to their close proximity to one another, and their more rapid development—in fact, those regions were completely covered, and when the cuticle was rubbed off, presented an uniform red and inflamed surface; just as if a blister had been applied to it. On the hairy scalp several bullæ were developed; they were quite distinct, and not large. On the tongue, also (around its margin), and on the mucous membrane of the palate they could be readily seen, and gave our poor patient great annoyance in his efforts to eat some bread, or to swallow fluids.

We could not observe any symmetry (as regards the two halves of the body) in the development of the eruption, although it is somewhat manifested in respect to the extremities, those on both sides being pretty equally affected. The skin between the bullæ was quite natural, no matter how closely they were placed.

Our patient was frequently interrogated as to whether he felt heat, pain, or itching before or during the appearance of eruption, and he always replied in the negative. He did not appear to be cognizant of any new crop of bullæ until after their rupture, and consequent exposure of the epidermis.

The eruption continued to appear by successive crops (the latest around the ankles and on the fore-arms) until Friday, the eighth day after his admission, the tenth or eleventh after the first bullæ were noticed by the patient; and during those days a certain amount of constitutional disturbance was present, characterised principally, if not altogether, by derangement of the digestive mucous membrane, which alone appeared to sympathise with the cutaneous affection.

For instance, there was anorexia and constant thirst, a foul tongue and confined bowels; but there was no nausea nor vomiting, no increased heat of surface, no accelerated breathing, no headache. The urine was normal; the pulse was regular, and did not exceed seventy-four beats in the minute, except on one day, when it reckoned eighty, probably from some passing excitement; and he complained of nothing except the irritation from the unavoidable friction against the denuded surface of the skin.

After Friday, no more bullæ appeared, his thirst declined, the tongue became clean, and the appetite returned.

At the end of a week he was out of bed, convalescent; some crusts and stains marking the places occupied by the eruption.

The progress of the eruption was watched from day to day, and we found from the outset that the large bullæ were perfectly useless for the purposes of observation; they were no sooner developed than they were ruptured by the friction of the bed-clothes and the movements of the patient.

Their course appeared to have been very rapid, and we saw nothing of them except the excoriated surface on which they stood.

Not so, however, as to the smaller ones; their progress appeared to be slower, and we could protect, to some extent, those which were situated on the front chest and upper extremities. Their course appeared to be as follows:—

First, a minute speck was observed without elevation of the cuticle; in twenty-four hours it was covered by a vesicle, about the size of a small pea, containing a transparent fluid, globular in shape, and without the slightest trace of an areola, even when viewed through a magnifying glass of considerable power. Next day the vesicle increased in size, but remained in every other respect unaltered.

On the third day, having attained its full size, the summit appeared slightly flattened, and the contained fluid began to lose its perfect transparency, while, at the same time, an areola, not wider than a hair's breath, could be seen around its base.

On the fourth day the fluid became decidedly opaque, more particularly marked at the summit of the vesicle, which was still flatter, and the areola grew wider and more distinct.

During the fifth and sixth days the contents of the

vesicle became sero-purulent, the areola spread, and the vesicle having burst, a thin crust was formed over the inflamed surface, which did not separate for some days after. Some of the contents were obtained from the transparent vesicles in their early stage, and it appeared to consist of an albuminous fluid easily coagulable by heat, and of a neutral quality. The duration of the disease was under three weeks, ten days of which were occupied in developing successive crops of bullæ without the slightest attempt at the healing of any, and the remaining days might be reckoned as the convalescent period.

During the progress of this case, the observations upon it were made and recorded at the bedside in presence of our hospital class, and I purposely abstained from referring to the literature of the subject until it had terminated. I am now disappointed in not being able to place it under either of the two forms into which pemphigus is divided by authors of works on "Dermatology"—namely, the acute and the chronic—for I find that it presented a combination of some of the signs and symptoms which are said to distinguish both.

For instance, the eruption was rapid in its development and short in duration; so far it might be considered acute, while, on the other hand, there was scarcely any fever or acceleration of the pulse, and thus it might be looked upon as non-acute or chronic. In the next place, the eruption itself presented all the characters which are said to distinguish and separate the two forms of the disease; some of the vesicles were small, and some were very large; some discharged their contents in forty-eight hours, while others remained transparent on the third day, and did not rupture till the fifth or sixth day; some were distinct from the beginning to the end, while others became confluent immediately they appeared. With respect to the inflammatory areola, which is said, and, one would expect, ought to be a striking and characteristic sign of the eruption, it was not discernible so long as the vesicle retained its transparency, but was established when the fluid became opaque, a change which we attributed to the irritating effect of the altered fluid upon the epidermis; and consequently of no value as separating the two forms of the disease.

Again, the eruption was very diffused, which we are told is a mark of the chronic disease; but it also occurred on the hairy scalp, where it should never be seen in that form. Altogether, after carefully reviewing the signs and symptoms of this case, which was undoubtedly well marked, and uncomplicated, we are inclined to the opinion that the appearances of the eruption and its locality are not sufficient guides to establish the two forms of pemphigus, as laid down in some works on dermatology. That the accompanying fever, heat, and itching bear little or no relation to the extent of the eruption, or the rapidity of its development; and *that*, if we except *the duration of the attack*, there are no data upon which to base this division. In fact, there seems to be no real distinction between the two forms, and the acuteness or chronicity of the disease depend more upon the duration of the attack, and the age and constitution of the patient, than on the character of the fever, or the appearances of the eruption. As regards the exciting cause of the disease, except the sudden arrest of the cutaneous secretion after violent exercise, I find no more efficient one in this case than the use of bad water. In the treatment of this case we saw no indications for depletion or lowering remedies; on the contrary our patient had a bark mixture, beef tea, milk with lime water, and even wine, all of which seemed to agree well with him, and to be required; and, with respect to local management, the carron oil liniment, and a weak solution of nitrite of silver, applied night and morning to the denuded epidermis, produced the best effects.

In standard works we are told it is injudicious to puncture the bullæ, because "we can apply to the excoriated surface no dressing so mild as it own albuminous secretion, and can protect the excoriated skin from the irritation of exposure by no covering so effectually as by its own cuticle." As regards the larger bullæ this caution is quite useless, because no efforts of ours can possibly prevent their rupture, and in the case of the smaller ones their *early puncture and discharge of the transparent fluid we found to be the very best method of preserving the cuticle for the protection of the true skin.* We punctured daily a number of bullæ on the chest and arms containing a transparent secretion, and after they collapsed we found they were the *only ones* which healed kindly and without any suppuration whatever. But after the contained fluid became opaque, and an areola was formed, the opening of the bullæ did not appear to check the progress or alter the course of the disease.

Since the foregoing case was noted I have had under my care in hospital a second case of pemphigus, occurring in a girl, aged 17. The eruption first appeared in the form of a few large bullæ on the inside of the knee-joint on the 12th March; neither accompanied nor preceded by any marked constitutional disturbance; the pulse reckoned 80; the skin was cool; the tongue a little white, but moist, and locally there was only some sense of heat and smarting, with redness of the surface.

In fact, the patient thought so little about the affection, that she did not mention anything about it until she was observed to walk lamely, and when examined the first crop of bullæ were destroyed.

Successive crops appeared for four days, when the eruption ceased; the surface was quite healed on the 12th day, and she was out of bed. The skin, on the 28th March, retained the marks of each bulla, some small, others large, some distinct, and some confluent, but all confined to the surface of the knee-joint.

At the end of three weeks from its first appearance the eruption again presented itself, and was ushered in by a sense of heat and smarting in the same joint, a slight chill, but no acceleration of the pulse, or other marks of febrile disturbance, except a loss of appetite. Large bullæ first appeared on the outside of the knee-joint, then down the leg as far as the ankle. Next, in an upward direction, along the thigh, over the whole front of abdomen and lower half of sternal region, across to the right hypogastrium, and on the dorsal regions on either side of the spine.

The eruption travelled by successive crops over the course and in the order described, and took four weeks to complete the journey. It was composed of bullæ as large as a four-penny piece, and vesicles not larger than a pin's head.

A bright redness of the surface preceded and accompanied the appearance of some, while others had not the slightest trace of redness around them. But during all this time the pulse never exceeded 80, and the appetite was pretty good for one obliged to remain in bed.

The treatment of this case, both locally and constitutionally, was the same as the first recorded.

Tonics and full diet, with wine, were administered internally, while externally a Sol. of Nit. Argenti was freely applied to the exposed epidermis, and every bullæ discovered during its transparent state was punctured; and it was remarkable that the epidermis covered by bullæ thus treated was completely protected, and no excoriation or inflammatory action whatever succeeded their collapse.

I may here again remark that this case, like the preceding one, would tend to show how impossible it is to place Pemphigus amongst acute diseases, and how equally difficult it is to divide it into the two forms laid down in works on Dermatology. Certainly neither the character of the constitutional symptoms, nor the appearances and course of the eruption are sufficient, and if we must admit an acute and a chronic form of the disease, I am still of opinion that the duration of the attack is almost our only guide on which to base the distinction.

After reading his communication, Dr. Hughes showed the members of the Society a drawing of Morrin's case, made at early stage of the affection, and also the patient himself quite convalescent, but still exhibiting the marks of the eruption.

Hospital Reports.

MATER MISERICORDIÆ HOSPITAL.

CLINICAL REPORTS BY DR. HAYDEN.

RHEUMATISM.

SUB-ACUTE RHEUMATISM; ENDOCARDITIS, WITH MITRAL REGURGITATION; DIPHTHERITIC INFLAMMATION OF THE THROAT, AND HÆMOPTYSIS.

M. J. R., aged 19, stationer's apprentice, admitted May 5th, 1867; healthy up to a fortnight since, when she was attacked with pain and swelling in both ankle-joints, and subsequently in both wrists. On admittance her pulse was 120, and full; tongue furred; perspiration moderate. No pain or tenderness in region of heart; cardiac impulse and precordial dulness normal. A soft bellows-murmur replacing the first sound of the heart was audible over the apex, and in the left axilla, but not at the base, where both sounds were normal, nor in the left back.

To have gr. ½ of calomel, with gr. i. of James's powder, every hour; and beef-tea with bread-crumb.

May 6.—Soft palate and uvula are covered with a diffuse dark-red blush, interspersed with patches of a yellow deposit, like that of diphtheria. Throat to be touched with a linctus composed of chlorate of potass., hydrochloric acid, and treacle.

7th.—Spat up about half-a-pint of florid blood last night. No evidence, either general or local, of tubercular deposition in the lungs. Stop calomel. Patient to have for drink iced "imperial."

9th.—Spat up a little frothy florid blood this morning. Pulse 96, soft; tongue moist, but denuded of epithelium.

10th.—Pulse 108; skin perspiring; throat still red, but free from deposit; no hæmoptysis since yesterday.

17.—Pulse 96; tongue clean and moist; appetite good. She is now quite free from pain, and was allowed to sit up in bed yesterday and this morning. Throat is now quite well, but cardiac murmur unaltered. She has been taking for the last few days half-an-ounce of lemon-juice, three times daily.

19.—This girl left hospital to-day, her health being apparently quite restored.

In this case, I am disposed to regard the endocardial murmur as being of long standing, and due to an antecedent cause. To this opinion I have been led by the absence of cardiac distress and excitement throughout her present illness, and by the soft character of the murmur itself. I have never witnessed an endocardial murmur of only a few weeks' standing, unaccompanied by precordial distress, and tumultuous action of the heart, in greater or less degree, and in which the murmur was not, at that period, somewhat harsh in character.

The occurrence of diphtheritic inflammation of the throat, and of hæmoptysis, without cough or other pulmonary symptoms or signs, is likewise interesting. In regard to treatment, I have found that this is precisely the form of rheumatic affection in which lemon-juice is most efficaceous, viz.—where the inflammatory action is subacute, the swelling not considerable, pain not severe, and tongue free from deposit, red, and denuded of epithelium. In such cases there is, not unfrequently, epigastric tenderness, and irritability of stomach, and, under these circumstances, I prefer giving the lemon-juice in effervescence, but in excess of the saturating proportion.

ACUTE RHEUMATISM, WITH ENDO-PERICARDITIS, AND ERYTHEMA.

Mary Anne C., aged 40; married; has had ten children, of whom the youngest is sixteen months old, but at the mother's breast up to the date of admittance, viz.—May 2, 1867.

On the night of Wednesday, May 1, she was attacked with pain in the left ankle-joint and left knee. On the dorsum of the left foot, and anterior surface of the left leg, an erythematous blush appeared, accompanied on the following morning with elevated patches of a deep red tint. The wrists and backs of her hands now became swollen, and covered with similar red elevated patches resembling erythema nodosum, and interspersed with a red papular eruption of the character of lichen; pulse 108, and full; skin hot and dry; precordial tenderness; first sound of heart diffused, soft, and ill-pronounced; left mamma distended with suck, and painful. An aperient of Rochelle salts, with tincture and infusion of senna, was directed to be given; the breast to be relieved by means of the breast-pump, and close attention given to the state of the heart.

5th.—A well pronounced frottement perceptible over the base of the heart to-day. At apex, first sound is soft and blowing. ½ grain of calomel, with 1 grain of James's Powder to be given every hour.

9th.—Burning heat of skin; tongue clean; pulse 108; cutaneous eruption unaltered. A loud double bruit, of a grating and superficial character, is audible over left base of heart. A soft systolic murmur is heard at the apex, and likewise feebly in the left axilla. Second sound not intensified in pulmonary artery. Up to this date the patient has taken altogether twelve grains of calomel; viz., the first six grains in doses of ½ grain every hour, and the remainder in similar doses given every third hour. She is now under the influence of mercury, being slightly salivated. To have a gargle of chlorate of potash and hydrochloric acid, calomel stopped, and aperient repeated. At her own request this woman was permitted to leave hospital on the 13th May, to resume her domestic charge. Her pulse had then come down to 90, swelling and pain had left her joints, and the eruption had partially faded. The apex murmur was still audible, but precordial tenderness no longer existed. The occurrence in rheumatic fever of an exanthematous, or a papular rash in the neighbourhood of the affected joints, is occasionally witnessed, and where there is great determination to the surface, such eruption may become general, and may lead to serious error in diagnosis. I recollect having seen a case of acute rheumatism in which, on the second or third day of illness, the entire body was covered with a semi-papular eruption, resembling the undeveloped stage of small-pox, and in which the diagnosis rested entirely upon the special implication of certain joints, and the presence of profuse perspiration.

The early detection of cardiac complication, as well as the satisfactory result of treatment, with small doses of calomel, frequently repeated, according to the method of Dr. Law, are likewise interesting. The class had the opportunity of observing in this case, from day to day, the gradual development of the stethoscopic signs indicating deposit upon the mitral valve, and upon the surface of the percardium.

LONDON HOSPITAL.

STATISTICS OF ACCIDENTS FROM APRIL 16 TO APRIL 23.

IN-PATIENTS.

Contusions	5
Fractured neck of femur	2
„ shaft of femur	1
„ patella	3
„ tibia and fibula	3
Lacerated thigh	1
„ scalp	2
Punctured wound of loin	1
Concussion	1
Inflammations after injury	2
Compound fracture of carpus (amputation above wrist)	1
Compound fracture of metacarpus (amputation of two outer fingers)	1
Burn	1
Retention	1
Incised wound of sclerotic and cornea evacuating the lens and vitreous	1

Fractured fibula		2
„ first phalanx of great toe		1
Total	In-patients	29
	Out-patients	289

ACCIDENTS TREATED FROM MAY 7 TO MAY 14.

IN-PATIENTS.

Fractured ribs	2
„ tibia and fibula	4
Tibia	1
Fibula	2
Orchitis (one already suppurated)	2
Contusions	6
Hernia (both reduced after application of ice)	2
Lacerated urethra	1
Hæmorrhage from varicose ulcer	1
Lacerated thigh	1
Retention from enlarged prostate	1
Scald	2
Scald of glottis (tracheotomy, death in three days)	1
Incised throat (both suicidal)	2
Compound fracture, great toe	1
Purulent ophthalmia	1
Sprained ankle	1
Punctured wound of cranium	1
Compound fracture metacarpus (amputation)	1
Concussion	2
Abscess	1
Total In-patients	37
Out-patients	325
	362

One of the cases of concussion is of much interest, as the injury is chiefly of the spinal cord. This, together with the details of the case of punctured wound of cranium, will be published when complete.

ST. GEORGE'S HOSPITAL.

ENLARGED SCROFULOUS GLANDS DISPLACING THE AORTA AND INNOMINATE ARTERIES.

Under the care of Mr. POLLOCK.

(Reported by Mr. E. C. Ring, Surgical Registrar.)

Wm. J., æt. 18, was admitted on October the 8th, 1866, with a large mass of scrofulous glands in the neck. He stated that it made its first appearance fifteen months previously as a small lump near the larynx. There was a large lobular mass of glands in the left side of the neck, extending upwards as far as the mastoid portion of the temporal bone, backwards to the edge of the trapezius, and forwards to the lobe of the ear, and angle of the lower jaw. From this it extended downwards to within an inch of the tendinous origin of the sterno-mastoid, overlapping the muscle above, but lying behind it below. It extended deeply into the neck, pushed the pharynx and œsophagus forwards, and the trachea to the right. Its lower border was irregular, and ran from the margin of the trapezius, about three inches from the mastoid bone, obliquely downwards and forwards, to terminate at the tendon of the sterno-mastoid. The boy was pale and thin; he was ordered syrup of the iodide of iron, and cod-liver oil twice a-day, with ordinary diet, and a pint of porter; and the surface of the neck was to be touched with the actual cautery, in the form of a small button of iron, while hot, and to be repeated three times a-week. He had a slight feverish attack on the 19th, and the application of the hot iron was discontinued. The attack subsided in a few days, and the cautery was resumed. The mass now began to diminish slightly in size, but the glands on the opposite side of the neck began to enlarge, and cough and shortness of breath came on. All active treatment was therefore discontinued, and on the 28th he was transferred to the physician for hæmoptysis and other chest symptoms, under which he gradually sank, and died on the 10th of February, 1867.

Mr. T. P. Pick, Curator of the Museum, has furnished the notes of the post-mortem examination:—

Externally.—The body was emaciated; the legs were œdematous; there was a large lobulated swelling on the left side of the neck.

Thorax.—There was a quantity of fluid in the left pleural cavity, and the lung on this side was compressed and destitute of air; the right lung was œdematous and full of frothy fluid. The pericardium contained a little fluid. The left side of the heart was open; the right contracted; the valves and structure were healthy.

Abdomen.—The liver was slightly lardaceous; the acini well-marked, and semi-transparent; the spleen was natural; the kidneys were large, smooth, and mottled; no amyloid reaction.

Neck.—The swelling in the neck was found to be due to tubercular infiltration of the cervical glands; these glands extended in every direction upwards to the occiput, backwards to the spinous processes; inwards between the pharynx and vertebræ to the right side, and downwards into the thorax; in this latter situation they had pushed the aorta over to the left side, so that the innominate artery was elongated, and crossed the trachea just at the point where tracheotomy is performed. The pneumogastric and laryngeal nerves were compressed and flattened.

CURRENT LITERATURE.

The Waste of Infant Life, by J. B. Curgenven, M.R.C.S. This is a pamphlet, the substance of which was read at a meeting of the Health Department of the National Association for the promotion of Social Science, by Mr. Curgenven, Honorary Secretary of the Harveian Society. His object was to show the proportion of preventable infantile deaths, both those which are occasioned by carelessness on the one hand, and those which are intentional on the other, whether directly inflicted or brought about at length, and as surely by designed neglect. This is a subject which has excited considerable attention of late in France, in consequence of the stationary condition of the population generally, and the fact that in some parts, instead of the numbers remaining stationary, they are evidently on the decline. At present, we are far from having reached so lamentable a state in this country. Every return which is made, shows a constant increase, more or less, in each locality of these islands. Still, it is a fact, that there are causes in operation amongst us which augment the mortality of infants, and which, by proper care, might be removed, at least, their influence lessened in a very appreciable degree. The author shows the different causes of the death of infants under one year of age during 1864.

"The deaths of children from dietic diseases, and diseases of nutrition, were as follows:—Want of breast milk, 1233; privation, 8; atrophy and debility, 20,923; thrush, 957; diarrhœa, 9818; convulsions, 20,821; teething, 2142. Thus we see that there died of these diseases in this year, 55,902 children under one year of age.

"The next class of cases is that of acute diseases of the respiratory organs. The deaths of children under one year of age from these diseases during the year 1864, were as follows:—Laryngitis, 363; croup, 880; bronchitis, 7400; pneumonia, 8382; lung disease, 1090; total, 18,415.

"The number of children who die of hereditary disease is not so great as is generally imagined, since these diseases are more fatal in youth and advanced life. The numbers of children who died of the most common forms of tubercular diseases during 1864, under one year of age, were as follows:—Hydrocephalus, 2836; tabes mesenterica, 2659; scrofula, 514; phthisis, 1076; total, 7085. Hereditary syphilis, 1089."

By comparing these figures, it will be seen that the number of children who die under one year of age, from diseases which follow defective nutrition, is more than twice the number of those who die from diseases not so produced. Such disproportion is not to be wondered at, if we think for a moment of the supreme importance of proper nourishment for an organism so recently developed. Nature furnishes it with subsistence suitable to its tender age, and if that supply through accident should be stopped, or through omission be discontinued, the unhappy little being must necessarily suffer, perhaps oftener die. As the writer observes :—

"The infant's stomach and power of digestion is adapted only for what nature intended it—the digestion of its mother's milk ; and any departure from this adaptation of nature involves derangement of function, mal-assimilation, failure of nutrition, disease, and death. What would be thought of the farmer, and what would be the result to his stock, did he attempt to rear his calves and lambs on a pap of chopped hay or grass ? Yet this is what is done with thousands of children. Instead of milk, their natural food for the first nine months of their lives, they are given a pap of bread or some farinaceous food, which is just as injurious to them, as the pap of hay would be to the calves."

Now, how comes it that we find so many infants deprived of their natural means of support ? It might be expected that the maternal instinct would be sufficient to prevent such anomaly, and secure to these helpless little beings their undoubted rights. "Can a woman forget her sucking child ?" Ordinarily not. But there are incidents and conditions of society in the ever changing combinations of human life, which alter strangely the order of nature, and interfere with proprieties the most legitimate. We can but hint them by another short quotation—

"The mother possibly has no breast-milk for her child, or she wishes to go out to her work by day ; or it may be an illegitimate child, or the child of a wet-nurse, placed in the care of a stranger ; or the mother may be in a higher rank of society, and desires to have her time for herself and her friends. Whichever it be, the case is the same. The child is hand-fed from its birth, or at all events from the first three or four weeks."

One more cause of this neglect of infant requirements is mentioned by the author in closing his remarks. It is one which has come under our observation more than once, and which we have long thought a proper subject for authoritative interference. We refer to "burial clubs," respecting which we have the following statistics:—

"According to the official figures, 18 in 100 children of the upper class annually die in Preston before attaining the age of five years ; in the middle-class, 36 or 37 per cent. In this same district, while infants of labouring men, outside the clubs, die at the rate of 36 per cent. before reaching five years, children of the same class who are insured in the burial clubs, die at the rate of from 62 to 64 per cent."

Looking, then, to these particulars brought under our notice in the pamphlet before us, nothing can be more proper than the suggestions of the author. He considers that some means should be adopted to forestall this "waste of infant life," and that the attention of the Coroner should be more frequently directed to the deaths of children, especially those which take place within their first year. Greater facilities, he thinks, should be given him for ascertaining the causes of death, and the circumstances under which it took place, so that he might be able to decide whether it was unavoidable, or whether blame rests anywhere, and if so, on whom. We have written and quoted more than we should have done, had we not felt that the subject is one of importance ; and we commend the pamphlet to all who feel an interest in lessening the evil to which it refers.

In the last number of the *Royal London Ophthalmic Hospital Reports*, Dr. Hughlings Jackson contributes a paper entitled "A Physician's Notes : Opthalmology," the chief object of which is to urge physicians and ophthalmic surgeons to do more work together. Dr. Jackson, without repudiating differentiation in practice, is desirous of seeing more unity of aim in the cultivators of medical science, and his paper is well adapted to promote that object. The controversy respecting specialism has been waged with such acerbity that it is quite refreshing to come across a paper in which these points are treated from a scientific point of view. We make the following extract with regret that we have not more space at our disposal, but our readers can procure the whole paper, together with a mass of other valuable matter from various sources, in the Journal named :—

"Were I free to work in this metropolis at the physiology of movement, from gross muscular movements towards thought, in the way I should prefer—supposing to begin with an ordinary general medical and scientific knowledge—I should study first in the wards and in the out-patient room of a general hospital, such symptoms as hemiplegia, chorea, and epilepsy ; next, at an Ophthalmic Hospital paralysis of the cranial nerves and defects of sight. Next, at a special hospital, for such symptoms as those of locomotor ataxy, and certain epileptiform seizures. Then at an Orthopædic Hospital for infantile paralysis and for so-called contractures. Now I would study specially deviations from healthy movement of the eyeballs, and the rudimentary delusional effects they cause. I would, after this work, return to the General Hospital, to study defects of speech, delirium, apoplexy, coma, &c. Varieties of defects of speech I should compare and contrast from difficulty of articulation to incoherence. At this juncture a careful study of laryngeal and throat diseases would be most desirable.

"Of course if any one were to work at different sections of medical practice, so as merely to add isolated series of facts to one another, he would really make little progress in cultivating his own mind. Such a man would dwell with exaggeration—hurtful to his own organization of medical knowledge—on amaurosis as a defect of sight, and too little on it as a defect of a highly specialized part of universal sensation. He would not improbably neglect altogether such symptoms as defects of smell, which defects, however, are really quite as significant incidents in the revelations which disease makes of function as defects of sight are. Such a student would be altogether unprepared for the last and the very highest medical study viz., of Insanity. Special work at diseases of the mind should, I feel convinced, be begun only after a large real experience of all the special phenomena of motion and sensation that damage to any parts of the Nervous System does or may give rise to. I say a real experience, as I suppose a collection of numberless facts, however accurately gathered, is not held to be of itself a real experience. Unless a man can put the particular phenomena he himself sees under more general Laws, or unless he tries to do this, he can scarcely be said to know or to be studying a thing in any very valuable sense. The knowledge the ophthalmologist has of muscular disorders of the eye ; the knowledge the physician has of defects of articulation, of chorea, and of epilepsy, and that the psychologist has of incoherence and delusions should aim to be physiological* units, each different but each related to a wide common know-

*Physiological unit is a term introduced by Herbert Spencer. To understand the wide meaning of this term, Mr. Spencer's work on Biology must be studied.

ledge of such laws—present or in progress—as those of the evolution of sensation and movement in organisms.

With its fifth volume, the *New York Medical Journal* begins what may be called a new series. It is now edited by Dr. Hammond and Dr. Dunster, and consists principally, as heretofore, of original communications and reviews. The new publishers (Messrs. Bradstreet) pledge themselves "to issue it in such a style as to make it a credit to the typographical art," and certainly in this respect the April number is beyond all praise. There is, however, one point to which we are desirous of directing their attention, as well as that of the editors. At the end of the journal there is an advertisement of six pages, entitled "Physiological and Therapeutical Action of Cod-Liver Oil." This advertisement is got up in exactly the same manner as the journal itself, and might easily be read as a part of it, the only distinction being that the word "advertisement" is placed before it *in the smallest type*. It may well be that the particular oil which this advertisement recommends is of excellent quality, but we think that advertisements as such ought not to be printed in such a manner as to mislead even a careless reader. Any medical editor on this side the Atlantic would protest against it. The *New York Journal* has acquired such a standing that it can well afford to take our well-meant hint.

The *Ophthalmic Review* has lost the editorial services of Mr. Thomas Windsor, who will, however, continue to conduct the retrospect—a department he has made quite a feature of this half-yearly journal, and which, in the last number, extends over forty pages.

Hardwicke's Science Gossip contains this month an illustrated account of the chignon fungus, from the pen of Dr. Tilbury Fox.

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The Medical Press and Circular.

"SALUS POPULI SUPREMA LEX."

WEDNESDAY, MAY 22, 1867.

THE LONDON COLLEGE OF SURGEONS *VERSUS* JORDAN.

THE readers of this journal will receive with satisfaction and approval the information that proceedings have been taken, and are now pending, against ROBERT JACOB JORDAN, of George-street, Hanover-square.

On Tuesday the 15th, at the instance of the London College of Surgeons, the Hon. ALFRED THESIGER, applied for a summons against ROBERT JACOB JORDAN, for holding himself out as a Surgeon, his name having been struck out of the College list in the year 1863. Since then the College has demanded back the diploma granted to the said R. J. JORDAN, who has refused to return it. In consequence of numerous complaints, it seems that the College has now determined to take further proceedings, and the present summons was taken out under the 21st and 22nd Victoria, cap. 90, sec. 40. Mr. TYRWHITT, the presiding Magistrate, granted the summons, which was to be heard yesterday, just at the hour we go to press.

We also hear that the Edinburgh College of Physicians has applied for a similar summons, and is alike determined to vindicate its rights and its character.

In a series of letters by "Detector," published in the MEDICAL CIRCULAR before its amalgamation with the MEDICAL PRESS, and which have since been issued in a separate form, under the title of "Revelations of Quacks and Quackery," will be found an account of the doings of the JORDAN family, which deserves the widest circulation, and which, at this moment, cannot fail to excite interest beyond professional circles. We now confine ourselves strictly to the facts that have just transpired, and which will, no doubt, be duly noticed in a future edition of the "Revelations."

The fact is especially interesting to the Profession, because it gives birth to the hope that the long-suffering patience of the public has been at last over-tried by the villanous practices of quack impostors, and that this action may be but the first stroke of a sweeping extirpation of such pests of society. All this time, the obscenity of these swindlers has been permitted to pollute our morality, not because Englishmen were indifferent to the results, but from the false idea that the remedy which the law affords would but assist in increasing the evil, by giving to the pretensions of these persons a publicity which they could not otherwise obtain. It is, we believe, only from a miscarriage of the law, or from the milk-and-water leniency of magistrates, that such a result has to be feared; and if the lash of the law be unflinchingly, vigorously, and persistently applied, we confidently hope, not only for a well-earned retribution on Mr. JACOB JORDAN and his "pals," but a wholesome publicity to their nefarious practices, which must prove a lasting protection to the public.

The pamphlet spoken of on the application, was entitled "Nervous Exhaustion," but this is not the only one that might have been brought forward. We have seen, during the last week or two, no less than three copies of a small pamphlet, with the title

of "Aphrodision," by Robert Jacob Jordan, at the end of which are printed in full the diplomas of the London College of Surgeons, and the Edinburgh College of Physicians. Two of these were sent through the post to one house. It is superfluous to enter on the subject of the contents of this production. It would be an insult in a Medical Journal to ask whether the circulation by the post of such pamphlets could be countenanced by the Profession. The great corporations which derive their incomes from the medical men of the kingdom owe a duty to themselves and to their members. Too long, indeed, has apathy prevailed in high places; and the tardy resolution to enforce the law will be looked upon as a concession to pressure from without which might long since have been made. It is undeniable, that acts likely to bring every member of our body into disgrace have too long been suffered in silence by our natural guardians. The corporations, not content with pushing an unworthy rivalry to extremes, and touting for customers in a manner that a petty tradesman would scorn, have laughed at the oft-repeated protests of an indignant press, and left unnoticed the remonstrances of their own members. Is this prosecution the announcement of a new era? May we hope that for the future a sincere attempt will be made to put down all forms of quackery which sap the foundations of public morals, and form the foulest excresence of the body medical? If so, well and good, and the corporations may yet make their existence tolerated. There is ample room for them all in this occupation—the fields are white with the harvest they may reap. Let them put in the sickle at once.

It may be noted that this is not the first time we have called attention to Jordan and his doings. We fully discussed him and his works in a leading article in our issue for 7th March, 1866.

Notes on Current Topics.

The New Sanitary Act.—Our readers are aware that under the 38th section of this Act, which was passed last year, a person afflicted with any infectious disease who unnecessarily exposes himself and endangers others, may be fined on conviction before a Magistrate. There can be no doubt that these diseases are communicated in hundreds of instances, in which they would never have occurred but for the neglect or carelessness of those who suffer from them. It is impossible in all cases to guard against such imprudence; still a great deal may be done to prevent the recklessness of individuals, and we hope the parish authorities will avail themselves of the power which the legislature has put into their hands. A case lately occurred of a man named Cook, who was under treatment for small-pox, in the "contagious ward" of the Aylesbury Union Workhouse. Contrary to the orders of the Medical Officer, he had twice made his escape, wishing as he said to see his friends. The first time he passed along the high road, through several villages, and at length reached Wingrave, where his friends resided. Here he entered several houses, and terrified the inmates, and the inhabitants generally, who had him conveyed back to the Workhouse. Again he contrived to escape, when the Guardians interfered and brought the case before the Magistrates, who severely reprimanded such conduct, and fined him 5s., and 12s. 6d. costs. This was a nominal fine, but the magistrates let it be known that they should deal much more severely with any such case that might in future come before them.

The Vaccination Bill.—We do not feel by any means enthusiastic about the measure now before Parliament. Its warmest supporters will probably, on reflection, acknowledge that it is full of serious defects. Compulsion in this country is not easily carried out in anything that bears the slightest resemblance to our infringement of the liberty of the subject, and there are always to be met with partizans who would defend the right of a father to let his child contract and propagate small-pox. We have tried a half measure, and found it an egregious failure. Unless we are prepared to enforce a stringent compulsory act we may as well let the matter remain where it is. Passing acts to let them be ignored is a weakness calculated to bring legislation into contempt. Mr. Rumsey believes in *indirect* compulsion, and this is certainly practicable without the intervention of Parliament. Suppose no child were admitted into schools and factories without the marks of successful vaccination on the arms, or a medical certificate that the operation had been properly performed. A little union among owners of factories and managers of schools would soon effect this. Suppose the heads of families insisted on the same qualification in engaging servants. Such a custom would do more than half-a-dozen clumsy acts of Parliament, laden with the machinery for producing an inexhaustible supply of useless unpaid for certificates. If we are to have vaccination by legislative enactment, the first provision should be the employment of the profession with adequate remuneration. To effect this we want a dozen first-class medical men in the House of Commons.

Mortality of Madras.—Wherever we have the means of forming a judgment, we invariably find that the diseases incident to humanity obey the same laws and are followed by the same consequences all the world over. In this country or another, it matters not, the sanitary reports vary only in numbers or proportions, consequent upon the different condition of the population to which they refer. Dr. Smith, the secretary of the Sanitary Commission in Madras, has issued his report for 1865, but as registration there is not compulsory, the numbers may not be strictly accurate. Still, they show that the same causes operate there as well as here, and produce the same effects. It appears that the health of that town during 1865, was in a better state than at former periods. The number of registered deaths was 11,216, being at the rate of 26 per 1000 of the population. The adults' deaths were chiefly from cholera, small-pox, fevers, diarrhœa, and dysentery, which produced a proportion of 11 per 1000. In London the proportion of deaths from these diseases was only 4 per 1000 in that year. Some little allowance must be made for this inequality from the fact stated by Dr. Smith, that miasmatic diseases in Madras take the place of tubercular diseases in London. Small-pox destroyed this year 399 less than the average. It seems that the Hindoos object to vaccination on religious grounds, and consequently died in

greatest numbers from this cause; though, on the whole, vaccination is becoming more general, and has been one means of lessening the mortality from small-pox. From cholera there was a small number of deaths compared with previous outbreaks. In 1862 it destroyed 3635, and in 1863, 1684, whereas the number this year, 1865, was only 944. The number of deaths from dysentery was large, amounting to 1159. Of children dying under one year of age more than one-third was from convulsions, the proportion from this cause being 1 to 8 of the whole population, while in London it was 1 to 30. The effects of climate on the European as distinct from the native population, is shown as follows:—Deaths from all causes, Europeans and East Indians 27·8 per 1000; Mahomedans 25·5; Hindoos 26·2. Thus we find that the mortality is greater there than in London. But this may be accounted for on the very same principles as are recognized here. It appears from the report that bad drainage, impure water, foul air, overcrowding, and filth, have mainly contributed to swell the mortality of the town.

Death in Mauritius.—A fearful mortality has occurred in this island. Fever has been raging dreadfully since the beginning of February, and has continued its ravages up to the middle of last month with unabated virulence. Heavy rains fell on the 14th, accompanied by strong breezes from the south-east, which lowered the temperature, and the cases have been fewer in consequence. It is hoped that this abatement will continue. The following is the mortality from 1st to 15th April:—

	DEATHS.	POPULATION.
Port Louis	2,879	80,000
Pamplemousses	931	60,000
Riv. du Rempart	316	21,000
Flacq	97	46,000
Grand Port	73	41,000
Savane	49	23,000
Black River	407	19,000
Plaines Whilhems	146	31,000
Moka	172	20,000
	5,070	341,000
From 10th to 28th February	2,061	
In March	6,433	
	13,564	

The disease has been very general. There was scarcely a house in Port Louis but what was visited by it in the beginning of April. But we find here, as we have frequently remarked elsewhere, that neglect of proper hygienic measures, invariably brings its own lamentable effects. In this instance, the accounts inform us, that "on estates where there is care and discipline, the mortality has been small, but it has been largest where Indians have been allowed to agglomerate without any control, and without the enforcement of any sanitary discipline." Quinine has been so scarce that "three ounces were publicly sold at £12 the ounce!"

Dr. Livingstone.—Nothing certain can yet be affirmed concerning this enterprising traveller. As is usual in all such cases, incidents occur which at one time raise our expectations, and at another seem to confirm our worst fears. Latterly we have felt totally in the dark respecting the fate of the intrepid explorer, and almost gave him up for lost; but a few days ago a ray of light appeared to break through the darkness, though, we confess, very feeble and flickering. We quote from the *London Review* of Saturday last: "On Monday evening Sir Roderick Murchison informed the Royal Geographical Society that he had that day received a letter from Tansibar, informing him that an Arab trader had just arrived from Lake Tanganyika, on which he had met a white man! It is well-known that the Tanganyika was the point which Dr. Livingstone was striving to reach when it is said he was murdered by the Mazite. Sir Roderick stated that no white man but Livingstone had left the shores of Africa for the Tanganyika; and who could the white man whom the trader met there be but the illustrious explorer whose death has been reported to us?" The reports hitherto received are not to be depended upon, and we must wait the result of the proposed expedition before our uncertainty can be removed.

Sir William Lawrence.—This veteran surgeon, whose baronetcy we recently announced, has been seized with paralysis. The seizure took place within the walls of the London College of Surgeons, just as he was about to enter the examining room and take his place at the Board. It would be superfluous to add that every assistance was rendered the eminent Sergeant-Surgeon to the Queen.

Outcasts.—Those to whom this significant title applies, exist in every walk of life—from the mansions of the rich and the lowly cottages of the poor, we see them continually wandering, with none to care for them, none to take them by the hand to give them a little seasonable counsel, which would do more towards their reclamation than all the threats of punishment, police courts, or reformatories put together. But the class for which we would now especially plead is that denominated "the street arabs." We cannot pass down a street or through a square of the metropolis—and London is but a type of most other large towns—without meeting a few of these juveniles, miserably clad, oft in a state of semi-nudity, whose pallid faces, filthy bodies, and squallid figures, but too truly tell their tale of woe; and none better, perhaps, than the medical man can bear witness of the sufferings and disease they undergo. Almost as soon as these little creatures are able to put one foot before the other, we find them brought out or sent out by their unnatural parents, and for what? To gain each of them some small pittance, either by begging or by stealing (it matters little in the scale of their social economy which), from whom 'tis quickly transferred by their wretched guardians to the till of the nearest *gin palace*, thus leaving the poor little labourers, day after day, at a time in their pitiful existence when they most need nourishment and maternal care, without food, except what they pick up in the streets and market-places; and night after night, with but the lodging and rest the cold damp ground or a door-step can give, these wretched units in creation, grow up—at least those for whom disease has not prepared a grave—into a large band of big boys and girls, and thence into manhood and womanhood—to stain the annals of crime with abominations too horrible even to contemplate. Now, we would beg to offer one or two suggestions for the consideration of Parliament, which, for ought we know, may have already suggested themselves to some honourable members, with many an anxious thought for their solution. Cannot something be done to alleviate the abject misery consequent on this pestiferous state of things? Without hospitals crammed, our police and criminal courts filled, and our prisons inundated—would it not be much cheaper to the ratepayers and the country at large, that an act should

be passed—vesting each parish with authority to place these little starvelings seen wandering about the streets, in a home provided for the purpose, teach them to read and write, and at a certain age—say twelve—let the Government take them in hand, and train them for the service of the country. There cannot be a doubt that a system having none but philanthrophic motives in view, with the principles of hygiene to its aid, would eventually work well. True, the expense the movement would first entail would not be inconsiderable, but it must soon meet its counterpoise—in a decrease of local taxation for police, and prisons—with increased confidence in the safety and respectability of our thoroughfares, to say nothing of its moral bearing upon the population generally.

Workhouse Infirmaries.—The Association for the Improvement of the London Workhouse Infirmaries have lately held a meeting, at which Lord Grosvenor presided. The object was to consider what course should be taken by the Association, now the New Metropolitan Poor Act was passed, and the objects chiefly attained for which the Association had at first been organized. It was agreed to discontinue active operations, but, at the same time, to watch the Act of 1867—and to hold themselves in readiness to take their former position again should occasion require. They have a balance of nearly £100 remaining, as their operations have been carried on gratuitously. Mrs. Beeton's case, whose evidence was so important, and who, it was thought, had "injured her prospects by her spirited conduct"—was referred to a sub-committee. It was decided likewise, "that a committee should be formed to consider in what manner the eminent services to the cause of the London sick poor of Mr. Ernest Hart should best be marked." Thanks were voted to "various members of Parliament for their attention to the Act now passed," and to the press, "for the support given to the cause which the Association had so successfully carried out."

Greenwich Hospital.—The question between the Admiralty and the Seamen's Hospital Society respecting Greenwich Hospital, to which we have devoted several articles, has been brought to a crisis. Dr. Bristowe and Mr. Holmes having been requested by the authorities to inspect the building, and advise as to the eligibility of its portions, have presented a report pronouncing in favour of Queen Mary's quarter. The Society must therefore accept this, or build another hospital, for there can be no pretence that these gentlemen were not eminently qualified to offer an opinion. Our proposition to create a large naval medical school at Greenwich is not, perhaps, likely to be accepted by the Government. Nevertheless, we maintain that such a course would conduce to the efficiency of the naval medical service, and be of the utmost value to our sailors. There is the building—why should it not be thus utilized?

Special Hospitals.—The only fair way of putting down special hospitals—on which some of our contemporaries have lavished so much abuse—is the plan now being carried out at several of our large hospitals, of creating a number of special departments. No one can be blind to the value of such a division of labour, nor deny that this is the best plan for securing the efficiency and completeness of medical education. In all the general hospitals there is abundant material for the establishment of a most complete series of special cliniques. At the same time, until such departments have been proved to work well, it is useless to decry infirmaries for special diseases—particularly while the medical officers of the larger institutions accept posts at the smaller. Moreover, a large amount of talent exists outside the recognized schools, and talent is apt to be restless, impatient, and ambitious. Then, as it often secures influential and wealthy friends, it is sure to create a field for its own exertions. The only natural remedy for this is for the larger hospitals to attach to themselves the talent they develop. The majority of the hospitals have handed over their departments to members of the existing staff—already overworked—leaving out in the shade a number of excellent men who might well have been invited to join. It is rumoured, as we some time since mentioned, that, at St. Bartholomew's—decidedly the most conservative of the London hospitals—the departments will be given to men not on the present staff. We trust it may be so. How well the plan has worked at Guy's is notorious, and we believe that each of our schools may, with advantage to students and patients alike, enlarge its staff. There is no want of material for study, nor of men ready to take up the work. Our hospital men are, indeed, ardent workers, but most of them have already too much on their hands. Why should not they take the initiative, by urging on managers the necessity of enlisting all the talent that now has to make its way by founding new institutions? Until something of this kind is done, no amount of abuse will put down the special hospitals. What these little institutions can achieve is to be seen in the present state of ophthalmology. Why should not the general hospitals have had the glory of what has been done in that special department? And why should the same question be left to be put about other departments, a few years hence?

Sunstroke.—During the late hot and sultry weather, two persons have died from this cause. The first was a policeman who, after being exposed all day to the sun, suddenly fell dead upon his beat. The other case was a man employed in the Imperial Gas Works. His business was to take coals in a hand waggon from the store to the retort, in doing which he passed repeatedly under a skylight through which the sun shone very powerfully. Suddenly he became giddy and appeared as if he was drunk, and expired before medical aid could be obtained. Inquests were held by Dr. Lankester, and verdicts according to the evidence were given.

Tar or Oil-cloth.—A man has been sentenced to ten years' penal servitude for setting fire to his house with intent to defraud an Assurance company. The theory of the prosecution was that he had placed in readiness and set fire to a quantity of tar. Dr. Odling found what he considered the results of the sublimation of tar. For the defence, it was argued that these results were due to the consumption by the fire of a quantity of oil-cloth, and Mr. Crookes, F.R.S., and Mr. Heaton, of Charing-cross Hospital, were called in support of this view. A number of other questions complicated the issue, but we call attention to this merely to mark the discrepancy in the opinions of eminent chemists as to the results of the combustion of these two common substances. The subject may be worth further investigation, and the issue, though not one f life and death, is, in a medico-legal point of view, of the utmost importance.

A New Substitute for Chloroform.—The subject of anæsthesia is yet in its infancy, and we may therefore be prepared at any time to chronicle further discovery. Dr. Protherœ Smith has made some experiments with tetrachloride of carbon ($c\,cl_4$) the inhalation of which he finds produces anæsthesia in a very short time, while the effect passes off equally rapidly. It is further stated that it does not produce some of the unpleasant symptoms that not unfrequently attend the administration of chloroform. Dr. Protherœ Smith has given it in several cases, and we sincerely hope the favourable opinion formed of it may be confirmed by further trial. We can well afford to add to our means of subduing pain and producing sleep.

Cholera Yeast.—The investigations of Herr Klob and Herr Thomé, originally detailed in Virchow's *Archive*, point to the development of an enormous quantity of a vegetable growth in the intestinal canal of cholera patients. At a recent meeting of the Pathological Society of London, Mr. Simon exhibited a specimen of the plant which had been given to him by Herr Thomé, during his recent visit to the Continent, to attend the Cholera Conference just held at Weimar. Mr. Hulke and Dr. Sanderson were appointed to report on the subject, and we may, therefore, look with confidence for early and reliable information.

The Council of the Royal College of Surgeons in Ireland.—The annual meeting of the College, to elect a Council and office-bearers for the ensuing year, will take place on the first Monday in June, and on that day the annual meeting and dinner of the Irish Medical Association, and the meeting of the Royal Medical Benevolent Fund, will also be held. We understand that Mr. G. H. Porter, Surgeon to the Meath Hospital, and for many years an Examiner in the College, will offer himself for the Vice-presidency, which will be vacated by Mr. Banon, in his presumed elevation to the Presidency. Mr. Butcher, the out-going President, will offer himself for election to the Council, in the room of Dr. Pentland, of Drogheda, who, we are informed, has expressed his intention of withdrawing. The only candidates as yet mentioned in addition to the existing Councillors, who will offer themselves for re-election, are Dr. Zachariah Johnson, and Dr. S. L. Bigger, of Kilkenny. We learn that Dr. Mackesy has been induced, by the solicitation of his friends, to reconsider his intention of retiring, and will ask for re-election to the seat which he now occupies.

A Shower of Oranges.—The Dublin gossips have been greatly amused and puzzled by a supposed celestial precipitate of oranges in the streets of their city. It appears that a considerable number of small dry fruit—resembling an orange in appearance, but only the size of a nut—were picked up one morning last week by different people in all quarters of the city, and, on further search, a further supply were found in the most unlikely situations—on the roof of the Bank of Ireland, the Observatory of Trinity College, and of a railway terminus, and, especially, in the neighbourhood of St. Patrick's Cathedral they were to be found. At first it was believed that they had been thrown out of a large drug store in that locality, and distributed by the winds, and by the aid of children and birds, all over the city; but the finding of them in places where, at least, the children could not go, gave rise to the idea that they fell from the clouds—a theory which is earnestly disputed and vigorously maintained. As yet the matter (not the berries) has only passed from mouth to mouth, in conversation, but we understand that it will form subject for discussion at the next meeting of one of the learned societies of Ireland.

The Limerick Union and its Medical Officer.—We learn that the Poor-law Commissioners have declined to call upon Dr. O'Sullivan to resign his appointment as Assistant-Surgeon to the workhouse, or to dismiss him by sealed order. The public spirit which has actuated the Commissioners in their protection of Dr. O'Sullivan from the malignity of the clique who wished to annihilate him, does credit alike to the wisdom of the Legislature in providing for such interposition, and to the Commissioners themselves individually. We cannot, however, but deeply regret the present circumstances under which the Union is left, without the use of a skilled resident, while the Officer, whose duty such attendance would be, is in open antagonism with his employers. We venture to suggest that Dr. O'Sullivan might, without bating any of his self-respect, express his regret at having been betrayed into disrespect towards ladies whom, we are sure, he would be the last to desire to offend, and that the Board of Guardians, in consideration of the exigencies of the situation, and of the sick poor who suffer the penalty of this disagreement, might reinstate Dr. O'Sullivan in the discharge of his functions. Both they and he owe it to their public duty to sink personal feelings of acerbity in maintaining the efficiency of the institution. In connection with this question, we cannot but remark, with extreme regret, the fact that, amongst those who were most prominent in the effort to throw dirt in Dr. O'Sullivan's character, professional and moral, was a member of our own Profession. When such quarrels between Boards of Guardians and their Medical Officers crop out, as they too frequently do, it is expected from the good taste, if not from the personal friendliness of a medical brother, that he will endeavour to avoid befouling his own nest, by displaying an unseemly animosity towards his co-professional. Unfortunately, as in Cork, so here the expectation has not been fulfilled, and we need only express our conviction that the "Dr.," who, by his interference in what concerned him not, brought upon himself the unqualified censure of the Commissioners, and originated the *melèe* which followed, covered himself with no glory, even in the opinions of those with whom he associated himself, and whose cause would have been stronger without the intrusion of the medical champion at all. We would prefer, on such occasions, to see medical men a little too deaf to the call of duty, than a great deal too ready to join the yelping chorus of "Hit him again, he has no friends."

Summary of Science.

(Specially Edited and Compiled for the Medical Press and Circular.)

By CHARLES R. C. TICHBORNE, F.C.S.L., F.R.G.S.I., &c.

[The Editor of this Summary wishes it to be understood that he is not responsible for the ideas, theories, or the correctness of statements made in any of the papers quoted in the compilation.]

(Continued from page 462.)

PHARMACY.

CULTIVATION OF MEDICINAL PLANTS.

Mr. Hanbury, in an interesting paper addressed to the Pharmaceutical Society, impresses upon them the necessity

of the cultivation of medicinal plants, and points out that the supply of drugs, which are without culture, is of a necessity fluctuating and precarious, and that whatever vegetable substance is needful to man, he must ultimately cultivate the plant producing it.

THE REDUCED SUPPLY OF SCAMMONY.

The demand for cotton consequent on the war in the United States, stimulated the culture of that crop in Asia Minor; and, as the growing and picking of cotton required many hands, the wages of the peasantry so greatly advanced, that it was less profitable than usual to collect scammony, and hence a reduced supply and enhanced price of that drug.

Political convulsions impeding the freedom of commerce also operate extensively in diminishing the exports of a country, and to such cause may be attributed the late high price of snake-roote, senega, and other drugs of the United States. The increased value of jalap is probably due to the unsettled state of Mexico.

East Indian kino of the best kind is a drug which, during the past few years, has become exceedingly scarce, and, we might say, has ceased to be important. Now, this sort of kino, which was produced near Tellicherry, was, a few years ago, brought into competition with kino, from another district of India, which, though considered inferior in quality, was freely sold, and at a much lower rate than the old drug. The price of Tellicherry kino consequently fell enormously, and it would seem that the drug has ceased to be brought into the market.

Ipecacuanhæ again, has doubled in value since 1850, owing partly, it is said, to the extirpation of the plant from old habitats, and the consequent necessity of collecting it from new and more distant localities. The rarety of a drug, or its total disappearance, is due, in some cases, to an improvident and ruinous method of collection. Thus, a century ago, there was still found in commerce loxa bark that had been stripped from tree trunks of no mean dimensions, and some such bark which we have seen, has a thickness of a quarter of an inch, and is rich in alkaloids. At the present day, old trees yielding this species of bark is unknown, all the loxa bark of modern commerce being derived from shrubs, which are stripped even to their smallest twigs, therefore it has been more advantageous to grow sugar, coffee, cotton, and cacao, than to collect drugs. South American elemi, liquidambar resin, tacamahaca, caronma, Winter's bark, and contrayerva root, have now disappeared, and oil of rhodium is now an artifical compound. Sagapenum and opopanax is very rarely imported. Other drugs require better care in their cultivation. Two are especially mentioned by Mr. Hanbury, viz.—hemidesmus root and chiretta.

We may add to this list many other drugs which are gradually becoming scarce and valuable, not the least important of which is rhubarb.

A NEW ALKALOID FROM OPIUM.

Messrs T. & H. Smith describe a new alkaloid that they have isolated from opium. The name is cryptopia. It is contained in the weak spirituous washings from precipitated morphia. Strong sulphuric acid produces a blue colouration with this base.

PRESERVATION OF VEGETABLE SPECIMENS.

To preserve herbs by means of carbolic or phenic acid, it is sufficient to place them in close cases, containing a little tube closed with cotton, which is filled with benzine or carbolic acid. The benzine should be renewed twice a-year.

Some naturally give the preference to phenic acid, because benzine vapour is extremely inflammable.

Phenic acid is sold at a low price; its vapour destroys insects completely, and its solubility in alcohol permits the use of it in preference to the solution of corrosive sublimate.

We give the preference to phenic acid for the preservation of plants.—*Journal de Pharmacie.*

ANALYSIS OF SANTONINE LOZENGES.

By M. Reickher.

The process is founded on the solubility of the active principle in chloroform, and the insolubility of the sugar.

The author employs a tube about twenty-four inches in length, and measuring about twenty-four cubic inches in capacity.

Having well dried this tube, the author placed in it a cotton cushion, on which was piled up the substance from two lozenges reduced to a powder; they had been previously well dried and weighed.

He secured the powder by another cushion, and fastened one end of the tube in a balloon dried at 100° and weighed, and then poured thirty grammes of chloroform in the open end. When all had passed he evaporated a dozen drops, and collected them on a watch-glass, at a gentle heat, to see if there was a residue of santonine. The balloon must be freed from chloroform in order to obtain the santonine which is readily weighed.

The author has experimented on many santonine lozenges. The results have been variable. They have often been *nil*, and have never exceeded the value of half a grain. The *modus operandi* pointed out in this experiment may be of use in the analysis of other medicinal lozenges.

PHOSPHATES.

M. Collas, says F. Moigno in his weekly letters to the *Chemical News*, continues his researches upon the phosphates in general, and, in particular, the phosphates of lime. M. Collas has, in fact, demonstrated that the phosphate of lime becomes a decomposing agent of putrefaction, and, after death, hastens the dissolution it was the means of preventing during life; it also favours the development of new existences.

In pregnant women or wet-nurses there is an absence of phosphate of lime in the organism, and the presence in the urine of sugar.

M. Collas advises the following preparations:—

1. *Solution of Phosphate of Soda*—namely, eight grammes of phosphate, in spring-water. It is to be taken instead of mineral waters, mixed with wine, and at the rate of two or three glasses per day.

2. *Phosphoric Lemonade.*—Phosphoric acid two grammes, in a litre of spring-water, taken from time to time as a beverage; hydrated phosphate of lime milk; ordinary hydrated phosphate of lime, thirty-six grammes; water, one hundred grammes, mixed together in a mortar, and passed through a strainer or fine sieve, one, two, or three spoonfuls, to be taken daily, especially in soup. This is the best way of administering phosphate of lime to rickety children. The phosphate of soda has the property of converting sugar into glucose in presence of carbonic acid.

OLEO-RESINOUS EXTRACT OF CUBEBS.

The oleo-resinous extract of cubebs is generally prepared by treating the pepper, reduced to a coarse powder, by alcohol at 60°. M. Constantine Paul prefers to this extract one which is obtained by acting successively on the cubebs by water, alcohol, and ether. The extract thus obtained contains all the active principles of the pepper of cubebs. The volatile oil, the balsamical resin, soft and acrid, and the cubebine. This extract is of a deep olive-green colour, a thick syrup consistency, and a strong ethereal perfume, in which we recognise, however, the proper odour. The savour of it is fresh and pungent, like that of mint. This extract corresponds to ten times its weight of the powdered drug, and he employs it enclosed in capsules which contain 75 grains.

PHARMACY IN THE PONTIFICAL STATES.

Translated from the French Notice by M. Adolphe Schaeuffèle, *Journal de Pharmacie et de Chimie.*

In the Pontifical States the Pharmaceutical Profession is only accessible to young students who have finished their literary studies, comprehending rhetoric and philosophy. The term of pupils is longer than in France, lasting for

several years. After having followed a special course at Sapienza (Sorbonne de Rome), they submit to an examination to obtain the diploma of "*Pharmacien*," the first-class, and the privilege of a free practice.

For the candidates for a diploma of the second-class the tests are much less important than for those who aspire to the first-class, and they are examined by a special commission, the institution of which recalls our ancient medical jury.

The first-class only have the right of preparing officinal medicines; those of the second class should apply to them for those preparations, which they are prohibited from making.

The prices of medicines are fixed by an obligatory tariff. The disputes between the "*pharmaciens*" and their clients are regulated by the Medical College of the Province.

The number of officials is limited. They reckon at Rome sixty "*pharmaciens*" for two hundred thousand inhabitants. The Roman "*pharmaciens*" have some religious orders amongst them. Several religious communities have enjoyed for some time the right of selling medicine to the public—the Brotherhood of St. Jean de Dieu, the Carmelites, and the Jesuits; but unless their laboratory was conducted by some of the Order who had obtained a first-class diploma, they would be unable to exercise the privilege. Several Prelates have assured me that the authorities have shown themselves very cautious in "granting" the privilege of selling medicine to the community.

The official establishments at Rome are generally well kept; there is found in them a collection of paintings, objects of art, bronzes, &c.

The medicines are put into vases resembling ours, and placed in glass cases; they are arranged according to their therapeutic properties, and not on account of their pharmaceutical appearance. This arrangement appears very important to us in a practical point of view. In case of error, the physical result is always more or less analogous with that which the physician would attain.

The use of purgatives is very general amongst the Romans, and in each house there is placed a glass at their disposal, in which they prepare for themselves their medicine—viz., a spoonful of calcined magnesia, 30 gramm of a sweetening syrup, according to taste, and a bottle of seltzer water.

The Roman doctors are generally badly paid, and it is in these establishments that they are most frequently sought for, consequently there is reserved for each of them in the "*pharmacies*" of his district an arm-chair, underneath which is placed a point of iron, which is fixed in the woodwork, and a slate. When an invalid has need of a doctor, he engages him by attaching to this point his card, with name and address.

The Roman law is particularly protective to the "*pharmaciens:*" it assures them an honourable and lucrative position.

Proceedings of Societies.

HARVEIAN SOCIETY OF LONDON.—April.

Dr. J. E. Pollock, President.

A paper was read by Dr. C. Meredyth on

"HYGIENE IN RELATION TO SYPHILIS."

The author began by observing that physiology and hygiene, pathology and therapeutics, ought not to be considered apart from one another, but as objective branches of a whole, namely, medical science, whose aim and end is the knowledge, in every aspect, of one subject. This subject is man. But the great truth must ever be present to the mind, that the facts which each branch establishes must all result from deductions springing out of the same axioms, arise from identical doctrines, and derive from the observation of analogous phenomena. Therapeutics stand in the same relation to pathology that hygiene does to physiology. Pathologists comprehend diseases in the most common generalities of their evolutions, which, strictly speaking, do not apply to any one in particular. Morbid phenomena vary according to a multiplicity of individual circumstances. We ought, therefore, by deductions derived from the organic observation of the subjects, seek out the reason of all the phenomena, whether ordinary or unusual, and then adopt without hesitation the most judicious course of treatment. Now, pathologists rather suppose the methods are known than develop the rules how to apply them, in a word their doctrines are insufficient to guide the practitioner in the choice of the curative method to be adopted, according to the ever varying phenomena of disease, due, in most cases, to the different constitutions, temperaments, and idiosyncrasies of the patients. The differences which men offer between them are the specific traits of human individualities. Now the hygienist takes cognizance but of individualities, the general types of science are only products of reason, not beings of nature: hence the reason why hygiene, stable in its principles, varies in its application. The diversity of ideas, the conflict of opinions concerning the sense to be attached, and the influence to be conceded to the terms, constitution, temperament, idiosyncrasy, and inheritance, demands that their application to the subject under consideration should be defined. The unanimous concord of our predecessors on the fundamental idea of the essence of temperaments is sufficient evidence in favour of the doctrine which recognises their influence as modifiers of individual organisms. But the fate of all truths arising from observation is such that this influence has been interpreted in accordance with the dogmatic conceptions that have successively obtained ephemeral ascendancy. Bordeu emitted the idea that every subject has his predominant organ, and that by classing them we might perhaps discover what is so much sought concerning temperaments. Hallé developed this idea, and emitted sounder opinions on this branch of science than any of his predecessors. But to Bégin reverts the honour of having based the doctrine of temperaments on solid principles. The temperament is a "constitutional state, whose existence makes itself felt in all parts of the animal structure, because it depends on the preponderance of development and action of one of the three systems which penetrate all the tissues, animate and preside over their functions and nutrition: a state whose influence on the organism is general and immediate." The three systems on whose preponderance of development and action the constitutional state depends are the sanguine, the nervous, and the lymphatic. The whole economy, in a state either of health or disease, is impressed by them with an indelible character. An indiosyncrasy consists in the preponderance of an organ, a viscus, or even an apparatus, it expresses the particular effects of the nutritive or inciting fluids on this or that organ, and the consequent result arising from its relative superiority of development and activity. The principle of idiosyncrasies is but the connections of organs through mutual sympathies by reciprocal irradiations. Although there is much affinity between the temperament and the constitution, their characteristics and properties are radically distinct. The constitution is the general result of all the organic elements and individual differences: temperaments, idiosyncrasies, age, sex, inheritance, and habit. It expresses the general formula of the particular organisation of each individual, the sum of resistance to morbific causes, the proportion of vitality, and, consequently, the chances of longevity. Constitutions must be judged, like many other causes, by the sum of their result, which is *strength* or *weakness*. In short, the constitution compares individuals with the ideal standard of organic harmony, the *temperamentum temperatum* of the ancients; the temperament, the general systems that modifiy and give the form to individual nature; the idiosyncrasies, the organs with each other which, by their preponderance of activity and development, solicit the action of morbific causes. Inheritance rather implies a virtual disposition of the organism to realise, with the concourse of occasional causes, the morbid affection, whose principal or virtuality has been communicated to it by the very act of fecundation, than the disease itself which affected the parents. We must not confound hereditary diseases with those contracted during intra-uterine life. Syphilis contracted during pregnancy, and transmitted to the fœtus, either before or at the time of confinement, does not constitute a hereditary disease.

The lesions which compose the group of constitutional syphilitic eruptions spring from one source, the disseminating throughout the whole organism of a morbid principle, conventionally styled syphilitic virus. Chemical and micrographical researches have revealed nothing concerning its essence. All that can be affirmed is, that it is not a volatile, but a fixed principle. Its virulent character is disclosed but by its effects on the

organism. In regard to it, purulence is opposed to virulence; for, as soon as purulence sets in, the virulent intensity diminishes, and contagion frequently becomes impossible. The virus communicates its properties to the substances with which it comes in contact, and these substances, like the virus itself, exercise a specific action, but on condition that they shall have undergone no change. It even appears that the mortification of the tissues, which become the seat of this pathological secretion, destroys its noxious properties. The absorption of the virus is immediate; ablation of the chancre and cauterization at its earliest appearance, have not prevented infection. It does not germinate *in situ*, but is disseminated throughout the whole organism by the circulation. Hunter declared that "the venereal poison is capable of affecting the human body constitutionally, while diffused in the circulation;" yet, he did not believe that it was located in the blood, or "that the blood of a pocky person was capable of giving the disease to another, even by inoculation." This opinion is now untenable. The reverse has been peremptorily proved. Hence two hypotheses. First, the blood is virulent, because the economy impressed and modified by the contaminating corpuscle, is apt to secrete the virulent matter. This hypothesis requires that all the humours should be virulent, and such is not the case. Second, the blood is virulent, because the contagious principle is mixed with it, and has multiplied itself in it. This last hypothesis, although admitted by Astruc, accepted by Rollet, is in no way proved. However, if true, to which principle of the blood does the syphilitic virus more specially fix itself? The probabilities seem to be in favour of the globules, which carry along with them the syphilitic virus. Thus, it would appear that the tissues are modified by the sanguine globules, which must themselves have previously undergone some alteration. What is the nature of this alteration? The toxic hypothesis which has generally obtained, does not explain the regularity of the evolution of syphilis, progressing in order from the periphery to the centre. Hunter, the originator of the idea of intoxication, was fully alive to this fact; he therefore supposed that the parts were susceptible in consecutive degrees; but his explanation is vague and unsatisfactory, and in no way accounts for syphilitic affections becoming more serious the farther they are removed from the period of infection. This element of the question seems a most important subject of inquiry.

Littré and Robin define a virus "an organic substance of what humour soever having undergone, by isomeric catalysis, such a modification that, without the physico-chemical characters being notably changed, they have acquired the property to transmit the acquired modification to the organic substances with which they are put in contact." This mode of action of the syphilitic virus does not appear to have been refuted; yet, it is more satisfactory than any of the hypotheses that have enlisted the favour of syphilographers. Grassi's analysis of the blood of syphilitic subjects shows that the immediate action of the virus on the blood, is to destroy the globules and increase the albumen, the consequent result being an anæmia; but no research has been instituted in order to discover how this modification occurs. Now, the catalytic operation is all sufficient, not only to explain the deglobulisation of the blood, but the desintegration of all the tissues by the virus; for the blood, considered in a histological point of view, is a real tissue, which, as such, is subject to the action of a destructive principle, exactly as the other tissues are. However, that does not mean that the destruction of the globules is the cause of the destruction of the tissues; for it can be shown that there is no co-relation between the degree of alteration of the blood and that of the organs. But at the same time that the blood constitutes an organ, it serves as a vehicle; it is the globules of the blood which carry along with them the destructive element, and put it in contact with all the tissues. Now, the organs impregnated with this vitiated blood cease to act. Now, rest invariably involves denutrition; in other words, the organ condemned to inaction is not long in being transformed into a pathological substance. That is a first cause of retrograde metamorphosis. If, besides, the destructive element carried along by the blood offers exciting properties, the glands can become the seat of a granulous infiltration and even of a true inflammation. The noxious properties of the virus are only revealed to us by its first evident effect—the chancre; but in the interval between infection and the first manifestation, the virus has not been idle; on the contrary, the destruction of the globules is very great. Mr. A. Fournier draws our especial attention to the fact that the patients who served for Mr. Grassi's experiments were in the early stage of the disease He says—"I repeat, they only apply, and can only apply, to the first stage of syphilis.—Beyond . . . analysis demonstrates that the blood recovers its normal composition." The process of contamination is at first slow and consecutive. The virus fixes itself on some of the globules, and, *without undergoing any change*, exercises upon them a molecular disintegrating power; these globules come in contact with others, which, in their turn, take up the virus, and also become agents of contamination; and as these go on multiplying, the molecular disintegration proceeds in a mathematical progression. The effect of the action of the virus is at first imperceptible, but as the molecular disintegration progresses, the whole economy becomes impressed and suffers in the very essence of its vitality, the nutritive fluid. The organism now reacts, and, assisted by nature's powers, strives by all the means at its disposal to thrust out the destructive element. All the channels of elimination are brought into requisition and taxed to their utmost powers. Up to this period of the disease, all the accidents which furnish a product of secretion are contagious and inoculable. After more or less time the virulent agent is eliminated; it can no longer be found in the blood, nor in any of the products of physiological or pathological secretion. The disease, however, has not exhausted itself, the cause only has been checked; the organism still suffers, and has to struggle to repair the damage it has sustained. This is the truly chronic period of the disease, to the impression of the virus has succeeded a general disintegration of the tissues on which it had exercised its destructive property, from which has resulted a profound modification of the organism; in fact, the animal machine has sustained a great shock and undergone a kind of degenerescence. The catalytic operation of the virus once admitted, the influence of individual differences becomes evident. By the constitution, we shall find the sum of resistance to the morbific principle of the disease, and the power of reparation of its baneful action. The temperament will furnish us with the form of the eruption, as can be shown by the analysis of 1800 cases, in which the constitutions, temperaments, &c., of the patients had been studied by the scrupulous Mr. Devergie.

The foregoing considerations lead to the conclusions:—

1stly. That the syphilitic virus is immediately absorbed on infection.

2ndly. That its first action on the organism is the molecular disintegration of the globules of the blood by catalysis, from which results an anæmia in the early stages, and a cachexia in the last stages, caused by the exhaustion of the animal machine, arising from the sustained efforts of an enfeebled organism to eliminate a destructive element in the tissues and repair their disorganization.

3rdly. That syphilitic lesions consist in a molecular disintegration of the tissues.

4thly. That on the relative strength or weakness of the constitution depends the intensity of the accidents of the disease; on the temperament the form; on the idiosyncrasies the particular direction of the virus.

5thly. That syphilis can only be cured by the elimination of the virus by nature's powers; but that it is the province and within the scope of art to aid and promote her salutary efforts.

Lastly. That all so-called specifics are incapable to modify, counteract, or destroy the specific properties of the virus, but are all-powerful when directed against the accidents due to its special action on the tissues.

Dr. Ballard remarked that he had never seen a case of infantile syphilis, although he had often heard of such cases. They must, he believed, be very rare.

Mr. De Meric had expected that the author would have read the argument that, as syphilis was a disease which enfeebled, we should therefore use it by analeptic and other hygienic applications. This argument was spurious: but erroneous, because syphilis was not strictly analogous to other exanthemata.

Dr. Drysdale was glad to learn the value of restorative means spoken of in cases of syphilis, instead of the continual assertion that syphilis alone of all the blood-poisons was to be treated empirically, and by means of so capricious a drug as mercury. Fortunately, as Dr. Ballard had said, hereditary syphilis was rare, in proportion to the vast number of parents who had been sufferers from syphilis.

Dr. Cock thought that syphilis, and all the exanthemata, would sooner or later be found to be diseases produced by the attacks of certain animalculæ, and that this was the way in which their action could be best understood.

PATHOLOGICAL SOCIETY OF LONDON.

At the meeting on the 16th ult., the following rules were adopted for the Committee on morbid growths:—

1. The name of the Committee to be "Committee on Morbid Growths and Deposits."
2. The object of the Committee is particularly to ascertain if any and what relation exists between anatomical structure and those clinical characters ordinarily regarded as "malignant."
3. The specimens to be submitted to this Committee are to be such as the President may deem proper. With regard to specimens so referred, the following regulations must be complied with :—
   1. The specimen must be either fresh, or in a jar or bottle with some preservative fluid.
   2. The specimen must be accompanied by a written description and clinical history.
   3. The specimen must be placed at the disposal of the Committee at the close of the meeting, for examination.
4. Where the above regulations have not been complied with, the specimens will not be reported upon by the Committee ; nor will the case be published in the *Transactions*, without the express sanction of the Council.
5. In the case of specimens taken from persons still living, it will be understood that the exhibitor undertakes, as far as possible, to inform the Society of the progress of the case, for publication in the *Transactions*.
6. The notes and descriptions of the specimens referred to the Committee, with the Committee's description of early specimens, will form "the Annual report of the Committee on Morbid Growths and Deposits," which will constitute a section in each volume of the Society's *Transactions*.
7. It will be desirable that the Committee shall have in view the object of ultimately preparing a general report on the matters of their investigation.
8. The composition of the Committee shall be determined from time to time by the Council, and shall be reconsidered at the commencement of each session.

SURGICAL SOCIETY OF IRELAND.

April 26, 1867.

The President of the Royal College of Surgeons in the Chair.

Dr. Wharton read the following

CASE OF NECROSIS OF THE TIBIA, IN WHICH THE CENTRAL PORTION OF THE SHAFT WAS REMOVED BY OPERATION,

Which was inadvertently omitted from the reports of the Society of that date.

Dr. Wharton said—The following account of a case of necrosis of the tibia, which I shall very briefly detail, is, I think, not altogether unworthy of the notice of the members of this learned Society. It affords an illustration of the benefits which accrued from timely assistance, by means of operative proceedings of a trivial kind, and is an evidence of the value of patience in the management of chronic surgical affections of bony structures, in which, from the nature of their organisation, repair must necessarily be slow. James Faulkner, aged 33, a pensioner, who had served some years in India, was admitted to the Meath Hospital under my care for the first time, in August 1863. He was then complaining of an ulcer, situate in the front and centre of the right tibia. This ulcer did not present any remarkable characters. It had existed, however, for a period of three months, and, according to Home's classification, now all but obsolete, might be regarded as an example of that variety dependent upon a deficiency of strength, both in the party concerned and in the constitution, to bring about a healthy action. Its size was small, about that of a halfpenny. In tracing its history, I learned that however trifling in itself it might appear, yet, in reality, it possessed considerable importance. It was not so much an affection in itself, as an evidence and result of pre-existing disease of the periosteum of the tibia. The patient had never received any direct injury, but it would appear that in June, 1858, five years previously, while on the march to Benares, he felt as if his "ankle-joint got a jerk, and turned under him." He continued his march, although he suffered much pain, and on arrival at his destination he mounted guard in his turn, and attended to the usual duties of a soldier. Subsequently he marched to other quarters, and remained till November, 1859, a period of eighteen months, without reporting himself as unfit for duty, notwithstanding that he became the subject of increasing pain from aggravated attacks of inflammation of his leg. It may be well to remark that although the patient was of a delicate aspect, yet he had never been previously out of health, and never had syphilis. His habits were strictly temperate. After a stay of five weeks in hospital, the ulcer was healed chiefly by means directed to improve the general health, which was much below par. In January, 1865, he fell under my care for the second time, not on account of the breaking out of the original sore, but in consequence of an ulcerated condition of the integuments on the upper and anterior portion of the tibia. This was accompanied with a very considerable discharge of pus. Upon examination, it was found that direct communications existed between the openings on the surface, and the subjacent cancellous tissue of the bone, and upon closer observation it was found that a portion of this structure was being separated. After the lapse of a few days—having enlarged, so as to connect the openings, I was enabled to remove the cause of so much distress. According to the account of the patient, who is a very intelligent man, this affection had originated in the November previously. It commenced suddenly, with but slight pain, to relieve which he made use of warm poultices, and in two days "an abscess broke through a pin-hole opening," which gave exit to pus having "a fetid odour." It was now evident, from an inspection of the leg, that necrosis, of the shaft of the tibia, was sure to follow, if, indeed, it had not already commenced. The periosteum was raised; sub-periosteal effusion had taken place; the skin and adjacent soft parts were dusky, thickened, and infiltrated; pain in the bone itself was complained of, and manifested on pressure. To relieve this condition, it was deemed advisable to incise the periosteum to the extent of between two and three inches. This was followed by immediate, but only temporary, relief. Free exit, however, was given to the discharge of the inflammatory products. Abscesses followed; which, when healed, were liable to re-open, or to be succeeded by others in their neighbourhood. As the patient's health had seriously declined, he was advised to leave hospital for a while in order to recruit his health. In July of the same year he was again—for the third time—admitted to hospital, much shattered in health, and not a little depressed at the near approach of the expiration of the period for which he had been granted a pension. This latter difficulty was happily removed, chiefly through the influence of Deputy Inspector-General O'Flaherty, whom I take this public opportunity of thanking for his kind services. The patient's condition, at this juncture, was one of much anxiety to myself, and of danger to him. A considerable portion of the shaft of the tibia was palpably necrosed. Severe pain, and a wasting discharge, from many openings, rendered it necessary that prompt and decided measures should be adopted with the view of averting a fatal termination, which appeared to be slowly but surely advancing. With the consent of my colleagues, I proposed to remove the diseased portion of the tibia—the question of amputation of the limb, which seemed almost inevitable, having been postponed and reserved in case of the failure of the proposal submitted to him. To this the patient eagerly consented. Accordingly, as soon as a sufficient improvement had taken place in his general condition, as effected by generous diet and other means, I proceeded to lay open the different sinuses which permeated the soft parts, and this done, I selected a favourable situation for the application of the trephine. Having, by this means, removed a portion of bone, the subsequent steps were carried out by means of elevators, cutting, and other forceps. The operation was submitted to, as became a soldier, chloroform not having been used. The cavity left in his leg almost amazed me. I could easily introduce my four fingers into, what I might call, the excavation, which had been made. The entire of the dead bone was not, however, removed, some portions of which could not be reached, and others probably being, as it were, locked. During his stay in hospital the patient was enabled, by means of an ordinary dressing forceps, to extract several small pieces as they became loosened. Improvement by degrees became evident, sleep and appetite returned, fever abated ; emaciation, which had taken place, was stayed, and the bottom of the wound became visible from the granulation which had commenced. In six weeks he was enabled to return home, where the strength of the limb became so much increased that unfortunately, in the act of attempting to lean, what proved to be too much weight upon it, he fractured his fibula. For the fourth time he was received into hospital,

suitable apparatus was made use of, and in due time the fracture was united. He was now sent to the sea-side for a month with much advantage to his general health, although it was more than probable that there still remained portions of dead bone to be removed, as occasional abscesses appeared, and the original openings had not closed. After a fifth admission to hospital, where he remained for several weeks, a second visit to the country, and for the like period, was arranged for him. After which he was for the sixth time admitted to hospital, in consequence of considerable inflammation having sprung up afresh, followed by a renewal of abscesses, arrest of the granulation which had been developed, and the establishment of severe constitutional disturbance. Hopes of saving the limb became now slender indeed. However, after a prolonged stay in hospital, the source of all this mischief, another, and I hope the last portion of dead bone, was at last reached and removed. Progress, which would appear to be permanent, has since October, 1866, been steadily manifesting itself. Pain and discharge have entirely ceased. The general health is re-established. The limb, though necessarily much deformed, is strong. The patient, with the aid of a stick, takes daily exercise on foot. The cast of the limb which I exhibit does not exactly display the amount of deformity, as it was taken from below the knee, the prominence of which renders the loss of the shaft more marked. The portions of necrosed bone removed, are on the table for your inspection. The patient is in the hall, and ready for the examination of the members of the society, if they so desire. I am sorry that, according to the present regulations of the Society, he cannot be allowed to walk into the Society, and exhibit his limb. I have purposely refrained from entering into any details as to the local or general treatment of the case. Such a course is unnecessary, and if entered upon would unwarrantably intrude upon the patience and time of the society.

Correspondence.

THE SUCCESSOR TO SNOW.

TO THE EDITOR OF THE MEDICAL PRESS AND CIRCULAR.

SIR,—I have the honour to enclose for your perusal a letter I have lately received from a Dr. Charles Kidd, with reference to certain remarks made by me in a paper, which I read before the Harveian Society of London, and an abstract of which, forwarded by the honorary secretary, you were kind enough to publish, April 24th, 1867. I also send my answer to the same.

While writing, may I correct a slight mistake in the published report. I said or meant to say that "I had on no occasion required to use more than *two* fluid ounces of chlorætherine in any one case," whereas, in my published answer, I am reported as saying that I had never used more than *one* fluid ounce.—Your obedient servant, ISAAC BROWN.

[COPY.]

25, Sackville-street, W., May 1st.

Dr. Kidd's compliments to Mr. Brown junior. His attention was drawn only to-day to a paper in the MEDICAL PRESS AND CIRCULAR, about chlorætherine, where it appears that, according to Mr. Brown, who was in Australia, Dr. Sansom has been giving most time and attention to chloroform, &c. Mr. Brown does not know that Dr. Kidd has been exactly twenty years writing about chloroform. Dr. Sansom was a first year's student when Dr. Kidd had stated things that now figure in S's. book copied from Dr. Kidd. Sansom has been three or four years compiling other men's ideas. Dr. Kidd worked with Dr. Snow, and has been twenty years!

Dr. Kidd has complained to Mr. Brown's father about this, and his stating that his father had most confidence in Sansom, which his father says is simply untrue and absurd.

The best thing Mr. Brown could now do would be to go to Renshaw's and buy Dr. Kidd's book, and see for himself; but certainly it is most unfair for him to be going about to Societies talking what is not correct. Dr. Kidd was sent exactly twenty years ago by the *Medical Times* to report on chloroform in Paris, when Sansom was a baby at school! It is most unfair, under the shadow of the "Surgical Home," to be stating what is not exact.

Dr. Kidd has had independence enough to stick by the "Home," in spite of all the recent clap-traps. The re-action now in all the hospitals in favour of Mr. Brown's father shows that Dr. K. was right. He went to present the testimonial too, and second Mr. Propert, rather than join the numerous people that have been making such a row!

Mr. Isaac Brown.

[ANSWER.]

14 Cambridge-street, Hyde Park, W.

May 3rd, 1867.

Mr. Isaac Brown presents his compliments to Dr. Kidd. He cannot but feel flattered that a scientific (!) worker of twenty years should take notice of any communication from so humble an individual as himself. At the same time, while thanking Dr. Kidd for the specimen pages of his book on chloroform, Mr. Brown regrets that a perusal of them has not at all led him to adopt Dr. Kidd's *naive* suggestion that he should purchase the volume. On the contrary, having read them, and also Dr. Sansom's work on the same subject, he is confirmed in his original belief, that Dr. Sansom is "without doubt next to Dr. Snow, the English physician, to whom we owe most for really invaluable investigations on the subject." This impression is still further strengthened by the fact, to which allusion is made by Dr. Kidd, that Mr. Brown has been in Australia, and in no portion which he has visited of that vast territory has he ever heard even mentioned the name of Dr. Kidd.

Mr. Brown finds *no allusion whatever*, in the abstract of his paper as published in the PRESS, *nor did he make any* to the "Surgical Home," as to his father's opinions on the relative value of Dr. Kidd and Dr. Sansom as administrators of chloroform.

Finally, as totally foreign to the subject, Mr. Brown declines to take notice of Dr. Kidd's opinion on "*domestic*" questions. He is in fact as indifferent on this point as on the matter of Dr. Kidd's unrequited scientific services. In this opinion he believes those who may take the trouble to think at all about the subject will fully agree.

Mr. Brown intends forwarding these letters for publication in the MEDICAL PRESS AND CIRCULAR.

Charles Kidd, Esq., M.D.

[If Mr. Isaac Brown was as well acquainted with Dr. Kidd's caligraphy as we are, he would not have asked us to immortalize that gentleman's style of argument. The space is not lost in the amusement which the correspondence will afford our readers. ED. M. P. & C.]

MEDICAL BENEVOLENCE AND COLLEGE DISTINCTIONS.

TO THE EDITOR OF THE MEDICAL PRESS AND CIRCULAR.

SIR,—As the election of Council and Officers at the Royal College of Surgeons is now approaching, it seems but just and reasonable, that in deciding whom to support, the Fellows may, *coteris paribus*, allow themselves to be influenced in favour of such candidates as are supporters of the Medical Benevolent Fund—a society that receives the fullest countenance from the two great medical bodies in Ireland, and whose principles must commend it to the support of every physician and surgeon in this country, who has a heart to feel for the difficulties, the distresses, and the sorrows of his poor professional brethren.—I am, sir, yours, &c., SUUM CUIQUE.

TO THE EDITOR OF THE MEDICAL PRESS AND CIRCULAR.

SIR,—As I get the credit of being one of the parties canvassing for Dr. O'Sullivan's situation before it is vacant, I have denied it, as you will see by the *Limerick Chronicle* which I send.—I am, sir, your obedient servant,

GEORGE INGLIS, L.R.C.P.E., L.R.C.S.E., L.A.H.I., &c.

Medical News.

ROYAL COLLEGE OF SURGEONS OF ENGLAND.—The following gentlemen passed their primary examinations in anatomy and physiology at a meeting of the Court of Examiners, on the 14th and 15th inst., and when eligible will be admitted to the pass examination:—

Messrs. Daniel George Rowlands, William Inglis Mason, Francis Day Atkins, James Cross, and William Butler, students of Guy's Hospital; James Williams Danahor, Charles John Jones, Henry Worsley, and Ellis Henry Ellis, of the Dublin School; William Agar Renshaw, Handel Ashworth, and Henry Davies Crighton, of the Manchester School; George Eolton, Thomas Benson, and George Rowell, of the Newcastle School; George Harrison Evans, Richard Nightingale Broughton, and William John Noel Bell, of St. Bartholomew's Hospital; Samuel James Davidson and William Hodgson, of University College; Edmund Williams Yorath, of Charing-cross Hospital; John

Rowland Wright, of St. Mary's Hospital; William Edward Bailie, of the Middlesex Hospital; Alfred John Crespi, of the Birmingham School; Charles Henry Beardshaw, of the Leeds School; Charles M'Cann, Thomas Henry Colman, and Ferdinand Braddles, students of the Westminster Hospital; Ebenezer Nicholas, and Charles Mead, of St. Bartholomew's Hospital; Robert Wilkinson, and George Brack Johnson, of the Newcastle School; John Thomas Redmayne, of Guy's Hospital; George Woodward, of St. George's Hospital; Henry Wotton, of Edinburgh; and Matthew Lorenz Bartholomewsz, of Calcutta and Edinburgh. Twenty-one candidates out of the fifty-seven who presented themselves were referred to their studies for the period of three months.

Medical Society of the College of Physicians, Ireland.—A Special Meeting will be held on Wednesday, May 22nd, 1867, "For the consideration of the Recent Epidemic," of the form of disease commonly known as black death. Chair to be taken at half-past eight, P.M.

Raw Pork.—The *Springfield* (Massachussets) *Republican* gives an account of six cases of trichinæ in a family in that town, caused by partaking of uncooked ham. A few days afterwards the symptoms of disease began to appear—pain and swelling of the eyes, pains in the stomach and bowels, vomiting and diarrhœa, and profuse perspiration. Afterwards the limbs became rigid, the least movement causing great agony. One of the daughters, seventeen years of age, died after a fortnight's illness. She could only lie with her lower limbs perfectly straight, the least change from that position causing her dreadful suffering. During all her illness her pulse was never slower than 130 to 140 a minute, while during the last four days it was too quick to be counted. During the first part of that time her hands and feet were cold and clammy, while the rest of her body retained its natural warmth. On a small piece of muscle examined *post-mortem* trichinæ were found at the rate of from 50,000 to 80,000 per square inch. The rest of the family are all getting well, except the mother, whose state is described as still critical.

Weapons of War.—The firing of the Chassepot rifle has astonished the Emperor of the French by its destructiveness. In two minutes a battalion of 500 men, at 600 yards from the mark, had fired 8,000 balls, of which 1,992 had struck the line of aim. The ground in front of the mark was so cut up that not a blade of grass could be seen; and the Emperor, perhaps, having in his mind's eye 500 Prussians standing in that dangerous spot, is reported to have exclaimed, "It is frightful! It is a massacre!" The Steinheil cannon is also said to be a success. This mysterious weapon, smokeless and noiseless, is based on the application of centrifugal force. The balls are propelled by the motion of a circular disc, traversing a groove from its centre to its periphery, whence they pass through the barrel of the gun. It is merely a scientific application of the weapon with which David killed the gigantic Philistine. Just as a stone, whirled round and round in a school-boy's sling, leaves it with enormous velocity, so this rotatory disc propels cannon balls with enormous momentum. A German artillerist has made cannon on the same principle, but with four barrels instead of one. There is something curious in this return to first principles. Our steam-rams are reproducing on a mightier scale the beaked galleys of Athens. Even steam itself is sometimes superseded—Ericsson, the famous Swedish engineer, having invented for the narrow sea-channels of his native country gunboats which are worked by the motive power of men. And now power is to be beaten out of the field by the very earliest and simplest form of centrifugal propulsion. The reporter of these marvels thinks he is not too sanguine in entertaining a hope that war will become more and more rare, owing to the dreadful perfection of the instruments intended to further it. An amiable idea, which we have seen expressed pretty often before. But when is it to be realized? So long as humanity remains what it is, there must be sometimes war, though the perfection of weapons tends to make it short, sharp, and decisive. If war ever ceases in Europe it will be due to other causes—to a closer alliance of nations; to a federation so intimate that for France to quarrel with Prussia would be as absurd as for Middlesex to make war on Surrey. Such a state of affairs, though remote, is not impossible.—*Globe.*

NOTICES TO CORRESPONDENTS.

Enquirer.—Will any correspondent say whether the external use of castor-oil, as an embrocation, is likely to cause a slight feeling of nausea similar to that experienced after taking the oil internally?

Dr. Croft, St. John's Wood.—Your paper shall appear in our next.

Mr. Harry Lobb.—Owing to great pressure on our space, we are again compelled to postpone your valuable communication. Proofs shall be sent you.

Dr. F.—Our rule is to have proofs returned to the office by Saturday, if the contributions are intended for the next issue.

Mr. F. J. B.—Sorry we cannot accommodate you. The topic is worn threadbare, and we do not think any good would come from a discussion in our columns.

Dr. M.—You are perfectly right in your surmisings of the journal in question.

Mr. R. O. is thanked for his prompt reply.

Hy. H.—The valuable library of the late John Hewson, F.R.C.S., was sold by auction, at Messrs. Puttick's Rooms, on Tuesday.

Dr. C.—Your letter arrived too late for substitution.

Dr. A. Lane, Coleraine.—Your wishes have received immediate attention.

TO THE EDITOR OF THE MEDICAL PRESS AND CIRCULAR.

Sir,—Would you kindly inform me why the doses of the spirits of chloroform and of the compound tincture of chloroform, in the new "Pharmacopœia," are the same—the former being one part in twenty, the latter two in twenty.—Yours obediently, Inquisitor.

[Our Correspondent will observe that we have directed attention, in our remarks on the "Pharmacopœia," to the absurd inconsistency in the doses of the preparations of chloroform. We are surprised to find that the highest authority in the profession sanctions a method of regulating the dose, founded on fancy and empiricism, rather than that dictated by proper attention to the relative quantities of the active ingredient, which enter into the several preparations of a drug.—Ed. M. P. & C.]

MEDICAL VACANCIES.

Halifax Infirmary—Assistant House-Surgeon.
Rye Union—Medical Officer.
Township of Toxteth-park—Assistant Medical Officer for the Workhouse.
Wandsworth House of Correction—Surgeon.
West Kent General Hospital—Resident House-Surgeon.
Newport Union—Achill Dispensary District—Medical Officer. Salary, £80 a-year.
Lurgan Union—Tartaraghan Dispensary District—Medical Officer Salary, £80; Fees, £40.

BOOKS, &c., RECEIVED.

On Happiness, in its Relations to Work and Knowledge. Second Edition. By the late Sir John Forbes, M.D.
The Sea-side Register.
The Principles of Æsthetic Medicine. By Joseph Peel Callow, M.R.C.S.
Chemical Notes for the Lecture Room. By Dr. Wood, T.C.D.
On the Management of Labour in Contracted Pelvis. By William H. Jones, M.D., M.R.C.S.
Archives of Medicine. Vol. IV. Edited by Lionel S. Beale, F.R.S.
New York Medical Journal.
Journal de Médecine et de Chirurgie.
Appendix to the Eighteenth Annual Report of the Prudential Assurance Company.
The Medical Remembrancer, or Book of Emergencies. Fifth Edition. By Jonathan Hutchinson, F.R.C.S.
On a New Process for Preparing Meat for Weak Stomachs. By W. Marcet, M.D., F.R.S.

Births, Marriages, and Deaths.

BIRTHS.

Whitling.—On the 3rd inst., at Croydon, the wife of H. Townsend Whitling, M.R.C.S., of a daughter.
Hardesta.—On the 5th inst., High-street, Lochee, Dundee, the wife of J. Jeffrey Hardesty, L.R.C.P. & S. Ed., of a daughter.
Iles.—On the 9th inst., at Watford, the wife of W. Iles, M.D., of a daughter.
Marshall.—On the 9th inst., at Mitcham, the wife of E. Marshall, M.R.C.S.E., of a son.
Fowler.—On the 9th inst., at Kennington-park, the wife of Dr. Fowler, of a son.
Browne.—On the 9th inst., at Camberwell-grove, the wife of C. Browne, Surgeon, of a daughter.
Newman.—On the 12th inst., at St. Martin's, Stamford, the wife of Wm. Newman, M.D., of a son.

MARRIAGES.

Meldon—Ryan.—On May 15th, at Anne's-street Church, Dr. Austin Meldon, fourth son of James Dillon Meldon, Esq., Casino, Milltown, to Margaret, eldest daughter of the late Patrick Ryan, Esq., J.P., of Seaview House, Ballyard, Tralee.
Bury—Cooper.—On the 30th ult., at Wincanton, Geo. Wm. Fleetwood Bury, F.R.C.S.E., of Whetstone, Middlesex, to Mary Florence, daughter of E. Y. Cooper, Esq.
Goldsmith—Robinson.—On the 30th ult., at the Parish Church of St. Marylebone, John Goldsmith, M.D., of Worthing, to Sophia Elizabeth Rowden, daughter of the Rev. F. Robinson.
Hooper—Dyer.—At All Saints', Upper Norwood, John Harward Hooper, M.S., F.R.C.S., to Anne, eldest daughter of the late Samuel Dyer, Esq., of Cromhall, Gloucestershire.

DEATHS.

Traer.—On the 23rd ult., in Paris, J. R. Traer, F.R.C.S.E., of Hans-place, Sloane-street, aged 34.
Hands.—On the 28th ult., F. Hands, Surgeon, of Berkeley, Gloucestershire, aged 70.
Black.—On the 30th ult., J. Black, M.D., of George-square, Edinburgh, formerly of Bolton-le-Moors, aged 79.
Westcote.—On the 1st inst., T. P. Westcote, L.S.A.L., of Martock, Somersetshire, aged 69.

Lecture.

THE METROPOLITAN WATER SUPPLY.

A DISCOURSE

DELIVERED AT THE

ROYAL INSTITUTION OF GREAT BRITAIN,

March 29th, 1867.

By Dr. E. FRANKLAND, F.R.S.

PROFESSOR OF CHEMISTRY IN THE ROYAL INSTITUTION.

(Continued from page 479.)

The organic matters containing nitrogen which occur, dissolved in water, are chiefly, if not entirely, of animal origin, being derived either from sewage or manured land; be their origin, however, animal or vegetable, no distinction, founded upon their source, can be drawn between their respective noxious qualities. After admixture with spring or river water, these noxious organic matters undergo slow oxidation, by which they are finally resolved into comparatively innocuous mineral compounds; their carbon is converted into carbonic acid, and their hydrogen into water, and these products can no longer be identified in the aërated waters of the river or spring; but the nitrogen is converted into nitrous and nitric acids, which, combining with the bases contained in most waters, remain dissolved, and constitute a record of the sewage or other analogous contamination to which the water has been subjected. With certain corrections presently to be mentioned, the analytical determination of the nitrogen contained in these salts, and in the form of ammonia, writes, as it were, the history of the water as regards its contact with decomposing animal matter. Such *previous organic contamination* may be conveniently expressed in parts of average filtered London sewage, which, if thus completely oxidized in a river, would yield a like amount of nitrogen in the form of nitrites, nitrates, and ammonia. For this purpose, average filtered London sewage may be taken as containing 10 parts of combined nitrogen in 100,000 parts, as deduced from the numerous analyses of Way, Hofmann, and Witt. The number so obtained as the *previous sewage contamination* of a water requires, however, a correction, since rain water itself contains combined nitrogen, as ammonia, nitrite of ammonia, and nitrate of ammonia. The amount of these substances present in rain which falls at Rothampstead has been most carefully determined by a laborious series of monthly analyses, made independently on the one hand by Messrs. Lawes and Gilbert, and on the other by Professor Way, and extending over two years. The results of these chemists accord well, and they give as the average amount of nitrogen in the forms of ammonia, nitrite of ammonia, and nitrate of ammonia, ·0985 part in 100,000 parts of rain water. This must be deducted, therefore, from the calculated amount of previous sewage contamination of any sample of water. It corresponds to 985 parts of previous sewage contamination in 100,000 parts of the water. There is no doubt that this reduction is too large, and therefore favourable to the character of the water, since, in most cases, but a very small proportion of the water of a river or spring falls as rain directly into the stream, and Professor Way has proved that almost every trace of the ammonia contained in rain water is absorbed when the water percolates through cultivated soils. Now, as three-fourths of the combined nitrogen in rain water is in the form of ammonia, it is evident that rain water must be deprived of much of its original nitrogenous contamination before it reaches such a river as the Thames. The very small amount of combined nitrogen found in natural waters of undoubted purity, such as that of Loch Katrine, for instance, also testifies to the liberality of the above allowance. The water of Loch Katrine contains only one-third as much combined nitrogen as that present in rain falling at Rothampstead, so that, starting from the base-line of purity above proposed, the water of Loch Katrine exhibits a *negative* previous sewage contamination equal to 575 parts in 100,000; or, in other words, it would require 575 parts of average London sewage to be added to, and allowed to oxidize in, each 100,000 parts of Loch Katrine water before its purity would be reduced to the standard with which I propose to compare the metropolitan waters. It is necessary here to remark, however, that, owing to the more copious rains of the Highlands of Scotland, the rain water of that district probably contains less combined nitrogen than that which falls at Rothampstead.

The nitrogenous organic matter which has escaped the process of oxidation above described, and which, therefore, still exists in the water at the time the analysis is made, constitutes what may be appropriately termed the *present sewage contamination* of the water. The existence of this contamination is shown by the presence of organic nitrogen in the water, and its amount may be expressed by the number of parts of average filtered London sewage (of the strength above described), which, if contained in 100,000 parts of pure water, would contaminate the latter with the same amount of combined nitrogen. By operating upon one litre of water for the determination of total combined nitrogen, one per cent. of sewage can be detected with certainty, but smaller percentages ought, in operations upon such a small quantity of water, to be considered as falling within the possible errors of experiment. Thus, in the table of analytical results given below, the indications of organic nitrogen, and consequently of present sewage contamination, amounting in the maximum to one-half per cent., ought to be disregarded, because, as the total combined nitrogen was determined in one litre of each water, the amount of present sewage contamination indicated by the analysis falls within the limit of possible experimental error. The subjoined tabulated results obtained in the analysis of samples of the metropolitan waters collected in February last, and during the present month, show, therefore, that none of these waters contained as much as one per cent. of present sewage contamination. This search for unoxidised sewage, or its equivalent, in a water, may be rendered more minute by operating upon a larger volume of water, by which the possible error of experiment is reduced in proportional amount. Thus, if 10 litres of water be used for the determination of total combined nitrogen, one-tenth of a percent of present sewage contamination can be ascertained with certainty. This operation has been performed upon 10 litres of the Thames water delivered by the Grand Junction Company, and collected during the present month; and it is satisfactory to find that this minute examination failed to detect any actual sewage contamination, consequently it is certain that the sample of the Grand Junction Company's water operated upon did not contain 1-1000th of its volume of unoxidized sewage. It must be consolatory to the drinker of Thames water to know that although, according to Mr. Bateman, the population within the basin of the Thames above the points at which the water is withdrawn for the supply of London exceeds 1,000,000 persons, the drainage of some 600,000 of whom is poured into the river, the whole of this fœcal matter is so completely oxidised before it reaches the water cisterns of London, as to defy the detection of any trace in its noxious or unoxidised condition. If the average flow of Thames water, just above the point at which the London companies withdraw their supply, be taken at 800,000,000 of gallons daily, the drainage of 600,000 people ought to produce a sewage contamination of 2250 parts in 100,000. It could scarcely be expected that this calculated number should approximate very closely to that obtained by the actual analysis of Thames water, since the calculated number depends upon many contingencies, as, for instance, upon the volume of water actually flowing past the points of withdrawal at the time the Companies abstracted the water analyzed; and secondly, upon the greater or less retention of the fœcal matters in the sewers of the towns draining into the river. It is interesting, however, to find that the sewage contamination of Thames water, as deter-

mined by analysis, does not differ much from that calculated according to the above data. The analytical table given below shows that the average previous sewage contamination of the water delivered by the five companies drawing their supply from the Thames during the months of February and March, 1867, was 2466 parts in 100,000 of water, the amount calculated from the number of persons draining into the river being, as just mentioned, 2250 parts in 100,000 of water. As summer advances, and aquatic vegetation becomes vigorous in the bed of the Thames and its tributaries, this coincidence of calculated and analytical results will probably be disturbed, as the water-plants can scarcely fail to withdraw an appreciable amount of nitrates and nitrites from the water, thus diminishing the quantity of combined nitrogen, and consequently of previous sewage contamination, as determined by analysis.

The second important class of impurities contained in water used for domestic purposes consists, as above-mentioned, of certain mineral salts which possess the power of decomposing soap. These substances are the hardening or soap-destroying constituents of waters. From a purely sanitary point of view they are of less direct importance than the organic impurities; still, by rendering efficient ablution and thorough cleanliness difficult of attainment, they doubtless indirectly affect the health of communities supplied with waters in which they are present in considerable quantities. The chief hardening ingredients in potable waters are the salts of lime and magnesia. These salts decompose soap: forming curdy and insoluble compounds containing the fatty acids of the soap, and the lime and magnesia of the salts.

So long as this decomposition goes on, the soap fails to produce a frothiness in the water, but when all the lime and magnesia salts have been decomposed by the action of the soap, the slightest further addition of the latter produces a lather when the water is agitated, but this lather is again destroyed by the addition of a further quantity of the hard water. Thus, the addition of hard water to a solution of soap—or the reverse of this operation—causes the production of the insoluble curdy matter above mentioned. Bearing this in mind, it is easy to understand the process of washing the skin with soap and hard water, which may be thus described:—First, the skin is wetted with the water, then soap is applied; the latter soon decomposes all the hardening salts contained in the small quantity of water with which the skin is wetted, and there is then formed a strong solution of soap which penetrates into the pores of the skin. This is the process which goes on whilst a lather is being produced in washing, but now the lather requires to be removed from the skin. How can this be done? Obviously, only, in one of two ways—viz., by wiping it off with a towel, or by rinsing it away with water. In the former case the pores of the skin are left filled with soap solution; in the latter they become plugged up with the greasy, curdy matter which results from the action of the hard water upon the soap solution occupying the pores of the cuticle. As the latter process of removing the lather is the one universally adopted, the operation of washing with soap and hard water is perfectly analogous to that used by the dyer or calico-printer when he wishes to fix a pigment in the pores of any tissue. He first introduces into the tubes of the fibre of calico, for instance, a liquid containing one of the ingredients necessary for the formation of the insoluble pigment; this is followed by another liquid containing the remaining necessary ingredients; the insoluble pigment is then produced within the very tubes of the cotton fibre, and is thus imprisoned in such a manner as to defy removal by subsequent washing. The process of ablution, therefore, in hard water, is essentially one of dying the skin with the white, insoluble, greasy and curdy salts of the fatty acids contained in soap. The pores of the skin are thus blocked up, and it is only because the insoluble pigment produced is white that such a repulsive operation is tolerated. To those, however, who have been accustomed to wash in soft water, the abnormal conditon of the skin thus induced is, for a long time, extremely unpleasant.

Nevertheless, opinion is not quite unanimous as to the advantages of soft water over hard. Some persons consider hard water to be necessary for the supply of the calcareous matter of the bones; others believe soft water to be peculiarly liable to attack and dissolve the lead of the pipes through which it is conveyed, or of the cisterns in which it is stored. An examination of the grounds upon which these opinions are based, would completely refute them; but the limits of this discourse do not permit of such a digression, and I must therefore content myself with a mere allusion to one or two facts in connection with them. First, as to the necessity of hard water for the supply of the calcareous matter of bones. If it be assumed that a man drinks daily half-a-gallon of Thames water he obtains from it 3¼ grains of lime, chiefly in the form of chalk. This amounts to not quite three ounces per annum, which does not seem to be a very large contribution to bony matter. Now, suppose the use of this water to be discontinued, and that no part of it is replaced by bitter beer, which always contains far more lime in a given volume than Thames water; but we will assume that the individual consumes one-third of a pint of milk per day, in this quantity of milk he receives more lime than his system acquires from two quarts of Thames water. Then as to soft water attacking and dissolving lead; it is by no means true, as a general proposition, that soft water does attack and dissolve this metal. The very soft water of Loch Ness as supplied to Inverness does not attack lead, as evinced by the condition of the lead pipes which I now produce, and through some of which that water flowed for six years; neither does the soft water of Emerdale Lake supplied to Whitehaven attack lead. Even those soft waters which do attack the metal, such as those now supplied to Glasgow and Manchester, only do so when the surface of the lead is clean and bright. The action soon ceases, in fact as soon as the metal becomes tarnished the pipes are protected, and no complaints of any symptoms of lead poisoning have for the past ten years been heard from these large cities. Lastly, a sample of very soft water taken from one of the principal streams from which it is proposed to supply London, has no action even upon clean and bright lead. Notwithstanding the numerous researches made in connection with this subject, the causes of the attack of lead by water have not yet been completely elucidated; it has, however, been established that the presence of oxygen and the comparative absence of carbonic acid in the dissolved gases are essential conditions to this action. Messrs Graham, Miller, and Hofmann, in their report on the Metropolitan Waters in 1851, first showed that carbonic acid, when dissolved in water, was a complete protection against lead contamination, and from a series of experiments recently made I find that two volumes of carbonic acid dissolved in 100 volumes of water completely protect even distilled water from such contamination. Rain water as it descends to the earth dissolves atmospheric gases, and this solution is afterwards continued in brooks and rivers. Of the chief atmospheric gases carbonic acid is by far the most soluble, 100 volumes of pure water can dissolve 100 volumes of this gas; oxygen, on the other hand, only dissolves to the extent of three volumes in 100 volumes of water. Nevertheless, owing to the much larger proportion of oxygen than of carbonic acid in atmospheric air (500 : 1), water takes up oxygen more rapidly than carbonic acid, and hence freshly fallen rain water acts upon lead, but when the water flows a great distance through an open conduit, the carbonic acid absorbed finally reaches the protecting proportion, and the action upon lead ceases, although the water retains its original softness. Hence there is no necessary connection between soft water and lead corrosion. Even distilled water left in contact with the air for some time loses its property of acting upon lead.

The third class of impurities present in potable waters, viz., matters which are not expelled at a red heat, and which do not decompose soap, require no detailed notice; they consist chiefly of salts of the alkali metals, such as the sulphates and chlorides of potassium and sodium. Unless

present in excessive quantity they are innocuous both as regards the internal and external use of the water.

We are now in a position to understand the following table which contains the results of the analytical examination of the waters supplied to the metropolis during the past two months :—

QUALITY OF THE WATERS SUPPLIED TO THE METROPOLIS DURING THE MONTHS OF FEBRUARY AND MARCH, 1867.

1 Names of Companies.	2 Total solid impurity in 100,000 parts of water.		3 Organic Carbon.		4 Nitrogen as Nitrates and Nitrites.		5 Ammonia.		6 Total combined nitrogen.		7 Previous sewage contamination.		8 Hardness.		9 Soap destroyed.	
	Feb.	March.	Feb.	Mar.	Feb.	Mar.	Feb.	Mar.	Feb.	Mar.	Feb.	Mar.	Feb.	Mar.	Feb.	Mar.
THAMES—																
Chelsea	28·58	30·96	·433	·185	·337	·352	·004	·004	·371	·355	2420	2565	16·2	18·3	194·4	219·6
West Middlesex	28·68	30·26	·340	·245	·356	·313	·006	·008	·412	·319	2630	2205	16·2	18·9	194·4	226·8
Southwark and Vauxhall	29·08	31·22	·293	·256	·357	·344	·005	·005	·361	·348	2630	2495	16·8	19·1	201·6	229·2
Grand Junction	29·44	31·54	·417	·311	·322	·345	·004	·004	·325	·348	2270	2495	17·1	19·4	205·2	232·8
Lambeth	29·36	32·10	·423	·289	·341	·341	·005	·008	·356	·347	2470	2485	16·0	18·5	192·0	222·0
OTHER SOURCES—																
New River	29·72	27·70	·272	·284	·350	·332	·003	·004	·396	·335	2540	2365	18·5	16·8	222·0	201·6
East London	33·56	30·36	·293	·270	·357	·320	·004	·004	·392	·323	2620	2245	18·8	18·3	225·6	219·6
Kent	39·84	39·90	·088	·114	·421	·417	·008	·004	·428	·420	3300	3215	23·1	23·0	227·2	276·0
South Essex	38·32	37·68	·143	·185	·844	·851	·007	·005	·850	·855	7520	7565	21·1	21·4	253·2	256·8
Water from Loch Katrine as supplied in Glasgow	3·28	...	·256	...	·031	...	·002	...	·041	...	0	...	·3	...	3·6	...

The numbers in columns 2, 3, 4, 5, 6, 7, 8, and 9, all relate to 100,000 parts of the waters. Column No. 2 shows the total solid impurity contained in each water, as delivered from the Company's mains. No. 3 gives the amount of carbon contained in the organic matter present in this solid impurity. No. 4, the amount of nitrogen in the form of salts of nitric and nitrous acids. Column No. 5 shows the amount of ammonia present in each sample, and column No 6 records the total amount of nitrogen in the several forms of nitrogenous organic matter, salts of nitric and nitrous acids, and ammonia; whilst column No 7 exhibits the previous sewage contamination, estimated as above described. Column No 8 shows the hardness of each water as estimated by the soap test—that is, the number of parts of carbonate of lime, or its equivalent of other hardening salts, contained in 100,000 parts of the water. Finally, column No. 9 gives the amount of soap which it is necessary to add to 100,000 parts of each water before a lather can be produced, this amount of soap being thus wasted or destroyed in decomposing the hardening constituents of the water. It is usual to call each part of carbonate of lime or its equivalent of other hardening material in 100,000 parts of water, a *degree of hardness*.* Each degree of hardness indicates the destruction of 12 parts of the best hard soap by 100,000 parts of water.

As an example of the mode of reading the above table, we may take the Chelsea Company's water, 100,000 lbs. of which contained, in the month of February last, 28·58 lbs. of solid impurity; the organic matter constituting a portion of this impurity contained 0·433 lb. of carbon. This solid impurity also contained 0·337 lb. of nitrogen in the shape of nitrates and nitrites, besides 0·004 lb. of ammonia, whilst the total amount of combined nitrogen in every form was found to be 0·371 lb. The above quantity of water, as supplied by the Chelsea Company, had been, after its descent to the earth as rain, contaminated with sewage or manure matter equivalent to 2420 lbs. of average London sewage. By gradual oxidation, partly in the pores of the soil, partly in the Thames and its tributaries, and partly in the reservoirs, filters, and conduits of the Chelsea Water Company, this sewage contamination had been entirely converted into comparatively innocuous inorganic compounds before its delivery to consumers. Finally, 100,000 lbs. of the said water contained 16·2 lbs. of carbonate of lime, or their equivalent of other hardening ingredients; whilst, if the water were used for washing, 100,000 lbs. of it would occasion the waste of 194·4 lbs. of the best hard soap.

* The degree of hardness more usually employed by chemists is that first proposed by Dr. T. Clark—viz., one grain of carbonate of lime, or its equivalent, in one Imperial gallon of water, or one part in 70,000 of water. The degrees in the above table harmonize better with the decimal arrangements of the rest of the analytical results. They are readily converted into Clark's degrees by multiplying by 7, and then moving the decimal point one place to the left.

For the purpose of comparison, I have also appended to the above table the results yielded by Loch Katrine water, as delivered in Glasgow, when submitted to the same analytical processes. A glance at the table will show how vastly superior, in all respects, is the quality of this water, as compared with the best at present supplied to London. 100,000 lbs. of this water contain but 3·28 lbs. of solid impurity; it has no sewage contamination, previous or present; and it has only 0°·3 degree of hardness, occasioning the destruction of only 3·6 lbs. of soap by 100,000 lbs. of the water.

Such is the chemical history of the water at present supplied to the metropolis, and it must be borne in mind that grave as are its defects, the mode of the delivery of this water to consumers is still more defective. That in a densely-populated city water should be delivered only once, and for a few minutes, in 24 hours, and not at all on Sundays, is a condition of things utterly incompatible with the supply of wholesome and palatable water. Even if the water of Loch Katrine itself were delivered in London, according to the system at present adopted by the metropolitan water companies, it would infallibly be rendered unfit for human consumption after 24 hours of exposure to the vile atmosphere and sewer gases in which the water-cisterns of London are systematically placed.

The fundamental defects of our present water supply may be thus summed up :—

1. Great previous sewage contamination.
2. Liability to present sewage contamination.
3. Great hardness.
4. Intermittent supply.

QUALITY OF THE PROPOSED METROPOLITAN WATER SUPPLY.—The waters from the sources of the Severn and from the Cumberland Lakes have not yet been submitted to the above analytical processes, and it is therefore impossible to compare them in all respects with the present metropolitan supply. The water of the Bala Lake, in North Wales, which may be regarded as similar to that which would be supplied by Mr. Bateman's scheme, has been examined by the late Dr. R. D. Thomson; and the waters of the Cumberland Lakes have been more elaborately investigated by Professor Way. From the analyses of these chemists, the following numbers are calculated :—

	Total solid impurity in 100,000 parts.	Hardness.	Soap destroyed.
Bala Lake	2·97	1°·1	13·2
Hawes Water	5·70	2°·9	34·8
Ullswater	5·94	3°·0	36·0
Thirlmere	5·16	2°·1	25·2

A comparison of these numbers with those given in the previous table exhibits the great superiority of the proposed waters over those at present supplied to London, as regards total solid impurity and soap-destroying ingredients, whilst

it can scarcely be doubted that waters obtained from such sources will be as free from deleterious organic contamination as that of Loch Katrine.

Amelioration of present Water Supply.—In the event of a new source of water-supply being at once determined upon, at least seven years must elapse before it can be rendered available to the metropolis, it therefore becomes important to enquire how far it is possible in the interim to ameliorate our present supply. The first and most obvious improvement would be the substitution of the *constant* for the *intermittent* system of delivery. With certain restrictions, all the metropolitan companies express their willingness to make this change, and with the unanimity of opinion regarding its advisability it is difficult to account for the delay in affecting it, unless it arises from the paltry cost involved in the alteration of the present fittings, which would fall upon the landlords of small tenements. Most towns of importance in Great Britain have been long supplied with water on the constant system; why then is this boon denied to London, where it is much more urgently required? Until this alteration is effected, it is, for the bulk of the population, almost useless to improve the quality of the water. Where a supply for one or even two days has to be stored in a filthy butt, exposed to the foul atmosphere of a crowded court or ally, good and wholesome water can never reach the lips of the consumers.

The most formidable danger arising from the use of the present water-supply is undoubtedly the liability to actual sewage contamination, such as that which there is every reason to believe destroyed so many lives in the East of London last summer. How can we best protect ourselves against this noxious contamination? The answer is, there is no absolutely reliable protection. Filtration through animal charcoal is perhaps the best, but I have shown that this process fails to remove from water the matter which is believed to constitute cholera poison. Permanganate of potash is also an excellent purifier of water, but there is not the slightest evidence that this agent can destroy cholera poison. Boiling the water for a short time is no guarantee that its noxious qualities are destroyed, for even on the very probable supposition that cholera and other similar poisons are organic germs, we know that many such germs, especially such as are of a low type, retain their vitality after being boiled in water, or even after exposure to a temperature of 248° F. for a considerable time. The late Dr. Lindley mentions the fact of raspberry seeds germinating after being boiled for jam, and as syrup boils at a considerably higher temperature than water, these seeds must have been exposed to a heat much higher than that of boiling-water. Nearly twenty years ago a curious red fungus or mould *(oidium aurantiacum)* attacked the bread of Paris. M. Payen exposed pieces of bread, upon which spores of the fungus had been sown, for half an hour to 248° F. in tubes, the red fungus afterwards germinated, although its vitality was destroyed when the temperature was raised to 284° F. I have undoubted evidence of the production of violent cramps and diarrhœa by the drinking of tea made from water, which, previous to boiling, had become contaminated with sewage.

Nevertheless, whilst none of these methods can be *relied upon* for the destruction of noxious organic matter in water, I am far from wishing to discourage their use as measures of precaution. More especially would I recommend filtration through animal charcoal as a most undoubted and valuable means of greatly reducing the amount of organic matter in water. I find that water will readily pass through a stratum of animal charcoal, three feet thick, at the rate of 41,472 gallons per day, per square foot, the organic matter contained in the water being reduced to one-half. 500 tons of animal charcoal would be an ample quantity through which thus to pass the whole of the present metropolitan water supply. This, at £13 per ton, would cost £6500. This charcoal would require to be heated to redness in retorts or ovens, for a couple of hours every six months. It would last for two years, and would then be worth nearly half its original cost as manure.

With regard to the excessive hardness of the London waters, it does not appear that any practicable scheme of amelioration can be contrived. Some years ago a beautiful and very simple process of softening hard waters by the addition of lime, was devised by Dr. Clark, of Aberdeen, but, although this process has repeatedly been tried by Water Companies, it has invariably been again abandoned, since, notwithstanding the cheapness of the material employed, the amount of carbonate of lime deposited by the London waters, when submitted to this treatment was, in the case of such vast volumes of water, so enormous as to cause the process to be pronounced impracticable. It is to be feared, therefore, that we must for the present be content to block up the pores of our skins with the greasy curd of hard water, but it is very desirable that the other ameliorations of which I have spoken, should be carried out at once, although they ought not to delay the introduction of a water-supply free from sewage contamination. Such a supply is a priceless boon to a community, and, relying upon our experience in other cities, it is not too much to hope that its introduction into London would be the means of banishing for ever *epidemic* cholera from the capital of this country.

Original Communications.

PARALYSIS: CASES ILLUSTRATIVE OF A NEW METHOD OF TREATING IT BY THE APPLICATION OF COLD OR HEAT ALONG THE SPINE.

By JOHN CHAPMAN, M.D., M.R.C.P.,
physician to the farringdon general dispensary.
(Read to the Harveian Society of London, April 4, 1867.)
(Continued from p. 433.)

I will now advert to two cases of paralysis due to cerebral affections, in the treatment of which the spinal hot water-bag was the chief remedial agent. Full reports of these cases were published in the *Medical Times and Gazette* shortly after their occurrence; the following is an abstract of those reports:—

6.—*Case of Apoplexy with Hemiplegia.*

On December 3, 1864, I was called to a gentleman, aged 55, whom I found in a state of profound stupor; he could not be roused, the right arm and leg were paralysed, the leg less completely so than the arm. When the hand was pinched severely there was no evidence of sensibility; the left hand was of a markedly dusky hue, the nails being slightly purple; the temperature of the left side was considerably lower than that of the right, and the pulse which was 82, was much feebler at the left than at the right wrist; the head was hot; both eyes were closed, the left one being protruded abnormally and slightly lachrymose; the face was drawn to the left side.

I applied an 8 inch spinal water-bag, containing water at 120° Fahrenheit, to the cervical and upper dorsal region of the spine. This bag was ordered to be refilled at frequent intervals, so that the application of heat might be continuous during the day or whenever the head should be found hotter than natural. A spinal ice-bag was also ordered to be applied at once during three-quarters of an hour to the lower third of the spine, and to be repeated the same afternoon. In less than twenty minutes after the hot-water bag was first applied, the head had become much cooler than before, and within twelve hours some degree of returning consciousness was evinced. The treatment was modified according to symptoms as the case progressed. The patient steadily improved day by day. At the end of a week he was talking with facility; on the 23rd of the next month he walked between one and two miles two days in succession, and in February he called upon me, and reported himself quite well, and impressed me as being so both mentally and physically.

December 3rd, 1865, exactly a year after the date of the above mentioned attack, I was called to this patient again. On the previous day he became suddenly giddy and incapable of standing. Shortly afterwards he vomited and was relieved, but his speech, which was previously perfect, had become much impaired, and immediately before I was summoned he suddenly lost the power of speech, his eyes becoming, as his wife said, "fixed and glassy." Ice was applied to the spine and benefited him considerably. I found him much better again, and his speech, though greatly impaired, was intelligible. I ordered ice to the lumbar region 45 minutes at eight P.M., a saline mixture and light food.

After passing a good night, vomiting came on at 5·30 A.M.; consciousness and the mental faculties were greatly impaired, and the power of speech was so far lost that he was quite unable to make himself understood. Ice was applied at nine A.M., and at ten A.M. I saw him, when he had somewhat improved: he was conscious, and he had recovered his power of speech to a slight extent; but his mind was dull and confused. The face and tongue were drawn to the left side, and both arms were slightly paralysed. Pulse 76, full and fairly strong in the right wrist, extremely slight and feeble in the left. I requested ice to be applied during thirty minutes every two hours, to the lumbar region; and the water bag at 115° Fahr. to the cervico-dorsal region during ten minutes, also every two hours, but alternately with the ice. The saline mixture was continued; and the patient was nourished with beef-tea. In the course of two days he was very greatly improved in all respects; the heat and cold were then applied at more distant intervals, and on the following day (December 7), I found the head clear, the speech fairly recovered, and the pulse in the left wrist much increased in strength and volume. The use of heat was then discontinued; and I requested the ice-bag to be applied along the lower two-thirds of the spine half-an-hour, and the saline mixture to be given three times a-day. By the 21st of the month the patient had quite regained his former health: his mind was clear, his speech distinct and normal; his face symmetrical, and his pulse in the left wrist as strong as that in the right. The medicine was discontinued, and the ice after being applied once daily until the 26th, was left off at the request of the patient, who, at that date, took a long walk alone.

7.—*Case of Apoplexy, with Hemiplegia.*

On March 14th, 1865, I was called to a patient at Brighton, a stout woman, aged 60, who, in the afternoon of the previous day, being excessively flushed, with a dull, heavy expression, staggered towards her bed and fell down senseless. The physician, who was immediately called in, said she was dying. He stayed with her until three o'clock of the following morning, and, on leaving, sent a woman to "lay her out." As stated by a spectator, "she gasped, seemed to breathe only at intervals, was blue round the mouth, clayey-looking; the whole features seemed to sink; her head, shoulders, arms, and legs were quite cold, and her face was covered with clammy sweat." She remained in this state during forty-eight hours. At the end of this time I visited her. The head and face were strikingly cold and death-like; the eyes exuded a thick gluey fluid; the left pupil was dilated and immovable in the presence of light, the right pupil was contracted; the right side was more dusky, and somewhat colder even than the left; the face was drawn to the left side. On tickling the soles of the feet, there was a slight movement of the left foot; none of the right.

In the treatment of this case, my efforts in the first instance were directed to produce alternate contraction and relaxation of the cerebral blood-vessels, in order to effect movement of the stagnant blood within the head. Accordingly, I applied heat on each side of the upper third of the spine for a few minutes, then removed the bag, while still hot, and shortly afterwards re-applied it. Within fifteen minutes of my first application to the spinal region, an area of about two and a-half inches in diameter in the middle of the forehead became quite warm. Before twelve hours had elapsed, the whole head and face became warm; and within twenty-four hours, or by the evening of the 16th of March, her whole body was warm. On this day she saw a cup of beef-tea in the hands of an attendant, and opened her mouth as if asking for it. The same evening she was believed to have recognised her daughter. From that date she steadily progressed in intelligence, so that by the end of the month she appeared to understand all that was said to her, could appreciate a joke, and could answer questions by monosyllables. She began to gain some power on the paralysed side, and, as the weeks passed, her improvement in intelligence and power of expression gave promise of her ultimate recovery, though, of course, with the probability that she would continue more or less hemiplegic. She lived about three months; but, unhappily, owing in part to the neglect of her nurse, sloughing over the sacrum came on unperceived, pyæmia followed, and proved fatal.

In both these cases the great therapeutical efficacy of the spinal hot-water bag was signally manifested. One of the sons of the first of the two patients, a very intelligent young gentleman, who sat up at night with his father, expressed himself much astonished by the power of the water-bag in reducing the heat of the head, and volunteered the statement that when his father's breathing was stertorous, the application of the bag speedily caused it to become quite tranquil. I may add here that, in the case of a patient under my care, who is liable to become unconscious by reason of a great and sudden afflux of blood to the brain, the application of this bag at a temperature between 115° and 120° Fahrenheit, will invariably cause the hot head to become cool, and simultaneously consciousness returns.

It will be observed that I applied heat to the upper portion of the spine, and cold below, at the same time, in the first of the two cases just reported; and I may add that, in the second case, I often had occasion to do the same. The simultaneous application of heat above and cold below, or the reverse, so far from resulting in the neutralization of the effects of the one by the other, actually augments greatly the force of each. For example, while heat to the upper third of the spine effects the contraction of the cerebral arteries, and so lessens the amount of blood in the brain, cold along the lower third of the spine, by causing the dilatation of the arteries of the pelvis and lower extremities, increases the amount of blood in those parts, and, therefore, to a proportionate extent, derives it from the chest, upper extremities, and brain. Hence, if I wish to exercise only to a moderate extent a sedative influence on the brain, I apply the lumbar ice-bag; but if I wish to act more vigorously, I apply the double-column hot-water bag to the upper third of the spine; if more vigorously still I use the two simultaneously. The two cases just described afford most satisfactory illustrations of the unprecedentedly great remedial power in cases of apoplexy which this method of treatment affords. Of course, the sooner after the "stroke" treatment is adopted, the greater will be its efficacy. My experience, however, enables me to say, that in cases of paralysis of several years standing, great good may often be done by means of these spinal applications. In the appendix to my pamphlet on "The Functional Diseases of Women," I published a case, the chief features of which are as follows:—

8. *Case of Chronic Hemiplegia, with rigidity of the left upper extremity, coldness of the paralysed side, headache, dorsal hyperæsthesia, and constipation.*

A boy, aged 13, afflicted with hemiphlegia (left side), was brought to me June 1, 1863. At this date I made the following notes of his condition:—Has a florid complexion, looks healthy, and is very intelligent. Complains chiefly of being unable to use his left arm. He cannot raise it above his head, as he can the right one—being unable to lift the hand higher than the face. The fore-arm cannot be completely extended, and is firmly fixed in the prone position. The wrist and hand are not only powerfully drawn to the

ulnar side, but so firmly flexed on the fore-arm as to resist whatever extending force the patient can apply with his right hand. If by additional external force they be brought into a straight line with the fore-arm, immediately they are released from it they return to their abnormal position. The metacarpal bone of the thumb is strongly adducted and held (immovable by the patient's will) in the palm of the hand. The four fingers are permanently bent inwards, the middle one being flexed over the end of the thumb and deeply indented by the thumb-nail. The third phalanx of the index finger bends backwards on the application of the slightest pressure, and is incapable of offering any resistance—that fasciculus of the flexor profundus digitorum, which converges into the tendon of this finger, being paralysed. The whole upper extremity of the left side is considerably shorter and smaller than that of the right. The left leg is also shorter and thinner than the right, although the arrest of growth has been less in the leg than in the arm. The patient cannot stand on the left leg, and when he attempts to extend it completely, he feels a stiffness at the top of the calf. If he places the heel on the ground, and then lifts up the fore-part of the foot, it immediately drops—he cannot sustain it. He can bear no weight on the fore-part of the foot, and cannot bend his toes either upwards or downwards, except in a very slight degree. The tendo-Achillis has been divided. The right pupil is slightly the largest ; the tongue deviates to the left side. The patient suffers from frequent and long-continued headache, on an average three times a-week ; if he gets up with it, it lasts all day. His back is peculiarly sensitive : he bursts into hysterical laughter the moment it is touched. The whole of the left side is habitually cold. Bowels constipated : not opened oftener than every other day. The patient's malady originated, his father says, in a fall on his left side when he was six months old. From this time the elbow was observed to be slightly bent, and the fore-arm always pronated. In his twelfth month the weakness was first noticed in the leg. In his third year he was taken to L'Hospital des Enfant Malades at Paris ; then to "a private doctor," who bandaged the arm and hung a weight to it ; he subsequently attended the Orthopædic Hospital in London, where, in addition to other treatment, by galvanism, &c., the tendo-Achillis was divided ; and, finally, he was a patient during two years at another Metropolitan Hospital.

My treatment of him consisted mainly in the application of ice along the spine, the only other measures adopted were, washing him all over every morning in cold water ; clothing him in flannel down to the wrists and ankles ; rubbing the back and paralysed side ; galvanism as mentioned below; and making frequent efforts to supinate the fore-arm.

The patient's headache ceased from the time the ice was applied. By the 8th of June, the left arm and leg became quite warm ; by the 15th, the bowels had become open daily, the preternatural sensitiveness of the back had ceased, and when the left heel was placed on the ground, the fore part of the foot could be held up during at least five minutes.

As early as July 14, the power of the whole left arm, either for movement or lifting objects, had greatly increased; the hand was much less flexed and drawn to the ulnar side than formerly ; the metacarpal bone of the thumb, which even a fortnight before needed a good deal of external force to draw it from the palm, could then be abducted by the will of the patient himself ; he could open the fingers, and extend them completely ; and the third phalanx of the index finger, formerly paralysed, he could flex strongly. His left leg also continued to grow stronger : he could stand alone upon it without support for a considerable time ; the stiffness formerly felt at the top of the calf, when he attempted to extend it, was completely gone ; he could hold up the fore part of the foot when the heel was on the ground as long as he liked ; he could move the toes, especially upwards, much more freely, and, as he said, he walked "much better" than formerly. I ordered the extensor muscles of the fore-arm, especially those of the thumb, to be galvanized frequently ; the treatment in other respects to continue the same.

The last record which I made of this case was July 28, and was as follows :—When the hand is in a passive state it is now quite straight in relation to the fore-arm, and its grasping power is notably increased. The patient can walk on either the heel or toes of the left foot, and in ascending stairs can bear all his weight so completely on his left toes, as to be able to go up by advancing each foot a step alternately. The bowels continue to be opened daily ; the left side continues remarkably warm, and during the two months of treatment headache has never been felt.

As the radial side of the fore-arm has been turned inwards ever since infancy, it is probably held in that position, not only by the pronator muscles, but by adherent tissue developed between the immobile structures. Holding this opinion, I directed the boy to make continuous efforts forcibly to supinate the fore-arm, and already the rotating power has increased. If his left tendo-Achillis had not been divided, he would now walk, I believe, with only such a slightly perceptible limp as would be due to the difference in length of the two legs ; there is more unevenness in his gait than that difference will account for, and I ascribe it to the operation which he underwent. Indeed, he could walk better, he says, before the operation than afterwards ; and he is probably right, for he also says that before the operation the muscles of the calf were fully developed, whereas afterwards they gradually wasted.

As in the treatment of cases of paralysis of long standing medicines are, notoriously, of slight avail, and as any merely theoretical considerations which I may advance in favour of the method I am advocating will not be likely to exert much influence, I shall, I hope, be permitted to adduce, as evidence in support of that method, the reports of two other cases which were published in the *Journal of Mental Science*.

9.—*Case of Hemiplegia, with persistent headache; impairment of intelligence and vision; obstinate constipation; and deficient expulsive power of the bladder.*

H. D. J——, suffering from hemiplegia, consulted me, August, 12th, 1863. He can lift the right elbow nearly as high as the shoulder, when the arm is flexed; but when extended, only as high as the mamma. The supra-spinatus muscle of the right side is considerably wasted. Can flex the fore-arm vigorously, but can extend it only imperfectly and feebly. Can flex the fingers and thumb closely, but not powerfully ; cannot extend the fingers beyond a right angle with the palm ; cannot extend the thumb. Cannot stand on the right leg without support ; it is not wasted. Cannot extend the toes except very slightly; can flex them better, but much less than he can the toes of the left foot. The right foot and leg, as high as the knee inclusive, are habitually cold ; so cold that even now he has a fire every night to warm them before going to bed. Drags his left foot, and wears the toe of his shoe out in consequence.

Has continuous pain on the right side of the head round the ear, sometimes extending to the back and front of the same side. Has constant singing in the right ear. Has paralysis of the sixth nerve of the left side. Has a little pain in the left eye ; cannot read test-type "12" with it ; with the right eye can read test-type "3" with difficulty. Tongue deviates strongly to the right side ; tactile power of tongue and of cheeks on each side the same. In the palm of the hand feels two points six lines apart on right side, four on left. Intelligence considerably impaired. Pulse 120, the same strength on both sides. Bowels so constipated as to be confined for a week together if no medicine be taken, the stools being very hard. Even with several strong doses of purgative medicine in succession, very often no action of the bowels is effected. The expulsive power of the bladder is "greatly impaired." He sometimes passes twenty-four hours without making water. The patient is generally very impatient and irritable.

After the treatment, consisting chiefly of ice to the spinal region, varied from time to time according to the require-

ments of the case, had continued until September 24th, the following was the condition of the patient :—

He can now raise his right arm vertically above his head; can extend his fore-arm vigorously, and all the fingers and the thumb completely. Can balance himself on the right leg without support. Can extend and flex the toes of the right foot very considerably, much more than formerly. The right leg decidedly warmer than before using the ice. In walking he can now put his left foot flat, there being no dragging of it as formerly. The pain of the right side of the head and the singing of the right ear, though not quite gone, are markedly lessened. The pain in the left eye is still felt at times, but is also much lessened. The paralysis of the sixth nerve of this eye continues about the same. Can now read test-type "$1\frac{1}{2}$" with the right eye, and "$8\frac{1}{2}$" with the left. Feels two points at five lines apart in each palm. Intelligence very greatly improved. The bowels are now easily acted on by a slight dose of aperient medicine, and are thus open at least every other day. The expulsive power of the bladder is much greater than before treatment; in fact, quite normal. Urine is now voided about three times in the twenty-four hours.

10.—*Case of Paralysis of the muscles of the tongue and throat.*

September 13, 1863, I was consulted by Mrs. ——, who, about four years ago, lost the power of her right hand for a time, but recovered it. A year later she had an attack of paralysis of the right arm, lasting only for a few days. The face was drawn to the right side, and the speech became "thick." She has never walked so strongly since this attack as she did before it. She had a third attack about thirteen months ago, when, having gone to bed well, she rose in the morning, and went to call her daughter, but found herself unable to speak. The arm was not affected at all this time. Both legs are now very weak, the right one being much the worst.

The tongue is still paralyzed, but its sensibility is normal. She can now protrude it slightly, and move it from side to side, but cannot speak at all. Formerly the tongue was stiff, and could not be protruded.

During the last two months she has become able to swallow fluids with difficulty, only a teaspoonful at a time. Has all her food minced, being unable to chew it, because she cannot guide it in her mouth. Uvula straight. Pupils equal, and sight fairly good. Forehead, face, submaxillary region, decidedly cool; upper extremities habitually cold. Sleeps well; appetite good; bowels regular. Goes out daily to walk, but feels a great stiffness in the limbs, particularly in the right leg and arm. The patient writes on a slate—"My nerves are greatly shaken; the most trifling thing makes me laugh or cry without any cause. I cannot account for this attack in any way. I have tried blisters, strychnine, galvanism, and homœopathy, without any effect. I have no headache nor pain of any kind, but often feel as if a band were bound round my head and throat (more round the throat than the head); and going up or down a single step, I fancy I must fall, though I know it is only a nervous feeling." I requested her to apply ice, until it melts, along the upper half of the spine, twice a day.

September 20th.—The patient looks better; the hands have been always warm since the treatment began, becoming so in three minutes after the use of the ice. Her expression is improved; she looks healthier, stronger. Pulse 92; tongue clean, bowels regular. ℞ Ammonii Bromidii gr. v, Potassi Iodidi gr. iiss, ter die.

27th.—Feels very well; arms, but not hands, warm; bowels regular. Face often flushes while the ice is on. Can eat better, and can say "Helen" and "No." To make the hands warm by putting them in hot water, by friction, and by warm gloves. To continue the medicine already prescribed, once daily, and to take of Ferri Carbonatis cum Saccharo gr. x, bis die.

October 3rd.—Much the same, but has a little more power in the tongue. Can say "Nothing." Bowels regular. Pulse 104. Continue the ice and the pills, and keep a roll of cotton wool beneath the lower jaw.

11th.—Is generally better. Can say "Yes" and "Fire" and all the letters of the alphabet except "w" and "y." The wool beneath the jaw has much increased the temperature there. Is always warm, *except just after dinner;* she has not the ice on them. To continue the pills, to put the ice-bag next the skin, and to suck jujubes in order to exercise the tongue.

17th.—Can now say "Bacon, finger, apple, paper, Mary, box." Hands warm, feet also. Pulse 100. Bowels regular. Tongue deviates to the right. Swallowing improved: takes a wine-glassful of porter daily. ℞ Potassi Iodidi gr. iij, bis die. Continue the ice and the jujubes, and make continual efforts to speak.

I never saw this patient again.

11.—*Case of Chronic Hemplegia, with extreme constipation and coldness of the paralysed side.*

F. J. aged 27, consulted me November 6th, 1863. He had to be carried into my room. Became paralysed seven years previously. The elbow is immoveably flexed, the fore-arm is pronated, the fingers and thumb are powerfully flexed into the palm of the hand. Can raise the right leg a little, but cannot flex it at all, the foot is drawn inwards, cannot move the toes in any way. The tongue can be only so far protruded as to get its tip over the teeth, can drink with great difficulty, and only very slowly, can bite, but cannot grind his food. Has wholly lost the power of speech. Breathes stertorously, and is often afflicted with an uncontrollable sardonic laugh.

Temperature of right hand 83° Fahr., of left 87°, of right leg 84°, of left 89°. Bowels habitually costive, open about twice a week, sometimes only once if aperient medicine is not taken; makes water with distressing frequency.

The patient came to me from Ireland, whether he returned after visiting me once. I ordered ice to be applied along the whole spine three times a day. Owing to his adverse circumstances the treatment was continued only a short time. May 18th, 1864, he wrote to me as follows :—

"When three weeks had elapsed [after the date the treatment began] an obstinate constipation, from which I had suffered for years, seemed cured. The temperature of my paralysed hand rose considerably, and for the first time for six years I hobbled about with a walking cane, and continue to improve."

In answer to an enquiry concerning his condition, which I subsequently addressed to him, this patient wrote to me, May 7th, 1866, that "since the very imperfect trial of the ice treatment" immediately after he first consulted me, he had "failed in procuring ice except for a day or two," when, as he said, "we had frost here;" that, nevertheless, his improvement had continued; that he had begun to "mumble a few words;" that "under favourable circumstances the palsied side is as warm as the other;" that "the bowels act very regularly;" and that, in respect to the excessive micturation with which he was troubled, "there is a grand improvement; for the last few weeks that failing has all but vanished, though it was nearly nine years old."

I regret extremely that this patient could not continue the treatment I advised: it is evident that it was doing him great good; and, to the extent of the benefit derived from it, the case would have afforded a still more decisive illustration than it is already of the remedial efficacy of the method in question, as well as an answer to an eminent London physician who saw the patient with me, and who then said to me, "Well you don't expect anything can be done here, do you?

Belfast Branch of the Royal Medical Benevolent Fund Society of Ireland.—Dr. Stewart, Hon. Secretary, thankfully acknowledges the receipt of £5, the annual subscription for the current year of the Marquis of Londonderry to this branch of the above society, per James Brownlow, Esq., J.P.

ON THE TREATMENT OF TRANSVERSE FRACTURE OF THE PATELLA.

By HENRY J. TYRRELL, F.R.C.S.I., M.R.I.A.,
SURGEON TO JERVIS-STREET HOSPITAL, ETC.

During the last three years seven cases of fracture of the patella have been under my care in hospital; five of the patients were men, two women; and the ages of the male patients were 35, 39, 45, 46, and 50 years. One woman was 25 years, the other 60.

All the fractures were the result of falls, and the direction transverse and about the centre of the bone or a little below it. In two of the cases—one male, and the female aged 25—the injury was so severe as to require very active treatment, both locally and constitutionally, for a few days, to arrest the inflammation set up in the knee-joint, and to prevent me from bandaging the limb tightly for a fortnight. In no case did I do so before the seventh day from the receipt of the injury.

The two first cases were treated on the single inclined plane, and turned out very well, union having taken place by ligament, the separation of the fractured ends being not more than three lines. In the third case, that of a man æt. 45, I followed Dupcyhen's plan, as laid down in his work "On Injuries and Diseases of Bones," page 229, translated and edited by Mr. Le Gros Clark, and although I carried out his directions most fully and accurately, I not only failed to get bony union, but the separation of the fragments was greater than in any of the other cases. Indeed, I quite agree with Mr. Clark in thinking that the uniform success of Dupcyhen's practice in obtaining bony union is unusual.

The principal object of the present communication is to describe a very simple, and what is of more importance to the patient, a very convenient and comfortable mode of treatment, as, during the treatment, it is not necessary to keep the patient for any lengthened time on his back. It must be obvious, also, that in the old, when there is a disposition to congestion of the lungs and abdominal organs, any apparatus which allows them to sit up, turn from side to side, and be removed with ease from one room to another, is a desideratum.

In the three cases in which I adopted the plan I am about to describe it answered admirably, particularly in the woman aged 60, who was very delicate, and suffering from a severe attack of chronic bronchitis; although, in none of these cases did bony union take place, still the amount of separation did not exceed two lines.

The apparatus consists of a long and thick paste-board splint applied the entire length of the thigh, leg, and foot in the following manner:—

As soon as the swelling about the knee has disappeared, and it is deemed advisable to apply any retentive apparatus, the leg and thigh being slightly raised, and the upper fragment of the broken patella being brought into its place by gently pressing the muscles of the front of the thigh downwards, I apply a strip of adhesive plaister, two inches broad, and sufficiently long to extend from the groin to the instep, and, while it is passed over the patella, the fragments should be accurately adjusted; the leg being still kept elevated, I roll a bandage from the toes upwards, and as soon as the knee is reached, before applying a figure of 8 around it, a semilunar wedge-shaped horse-hair pad, three inches broad and three-quarter inch thick at the base, should be placed immediately above the patella over the plaister, and the hollow of the ham carefully filled with cotton wadding. Then a figure of 8 bandage being applied so as to press the pad well downwards, the roller is continued up to the groin. I prefer rolling the thigh bandage in the way described to the ordinary method, from above downwards, as I believe it is less likely to be disarranged, and the elevated position of the heel, the figure of 8 round the knee and the plaister prevents the quadriceps muscle from acting on the upper fragment. The bandages being adjusted, I now take a piece of the strongest paste-board, sufficiently long to extend from the great trochanter to the heel and twelve inches beyond, and of sufficient breadth to enclose three-fourths of the circumference of the thigh, knee, leg, and instep; and having thoroughly softened it in hot water (a convenient vessel for holding sufficient water is a hip-bath), as soon as it becomes sufficiently cool it is accurately moulded to the thigh, leg, and foot, and, in order to preserve its shape, a bandage is applied from the toes to the groin, and the heel is placed on a pillow. Next day the bandage being removed, the edges of the splint are neatly rounded off with a shoemaker's knife, and it is lined with a layer of fine cotton-wadding. The splint is now permanently applied and tightened by a bandage wound neatly from the toes to the groin, or if the weather is warm a few straps, such as are used in bracing up the sides of a box splint, will be sufficient. Finally, the leg is slightly elevated by placing a pillow under the heel. No danger of acting on the patella need be apprehended (as the whole lower extremity is one fixed piece) by the patient turning on his side or sitting up. If the bandages and splint have been properly adjusted it will not be necessary to stir them for a considerable time; indeed, in one case I only took them off three times during eight weeks.

It will be observed that I place no pad beneath the patella for the following reasons:—

1st. It is not required; as the lower fragment being not acted on by any muscle, has no tendency to be displaced.

2nd. A pad so placed is almost certain to tilt the superior edge of the lower fragment upwards and forwards. No danger of interfering with the circulation of the circumflex-articular arteries can exist by the plan of treatment above described, as the bandage around the knee is not so tightly applied as to constrict them.

If it is thought desirable (as I believe it is) to keep the knee fixed for a certain time after the patient is allowed to walk about, I know of no better splint for the purpose than can be formed by simply cutting the paste-board of sufficient length to extend from the middle of the thigh to the ankle, and removing the foot-piece.

MEDICAL SOCIETY
OF THE
COLLEGE OF PHYSICIANS OF IRELAND.

This Society met on the 22nd instant to consider the late epidemic which Dr. Stokes has named "Malignant Purpuric Fever," but considered by others to be "Cerebro-Spinal Arachnitis."

The President, Professor Stokes, in the Chair.

He declared the order in which the various cases were to be brought forward, which had been determined by ballot; and called upon the Honorary Secretary, who then read the following communication by Surgeon-Major Cogan, 2nd Battalion, 2nd Regiment:—

The following are some brief notes of cases of a disease (supposed be what is now called "Black Death") that came under my observation lately, but I cannot say if I am justified in giving it such a nomenclature, as, in all my experience of epidemics, I have never met with any disease presenting appearances or symptoms similar to what I shall now briefly state.

In order to arrive at some conclusion, as to the origin of the disease, and to its making its appearance in this barracks, I shall first commence by stating that part of the regiment was out on duty with the Thurles Flying Column, and when in Thurles, the beginning of April last, two men of the regiment were attacked with typhus fever; one of them died in twenty-seven hours, and it was reported to me by some of his comrades that he was covered all over with purple spots when he died. The other man was attacked at the same time, and has since recovered, but, as he has not yet returned to his regiment, I cannot say anything more about him.

The Flying Column about this time was broken up, and the detachment marched from Thurles to Roscrea, taking two days for the journey. On the day of their arrival at Roscrea (5th of April), one of the men complained of febrile symptoms, and the officer in command very judiciously ordered him into the regimental hospital at Birr, by train, a distance of about ten miles. I saw him immediately on his arrival, when symptoms of typhus fever soon presented themselves; he got through the attack steadily but slowly, and when convalescing he injudiciously exposed himself in the open air on a wet day, and got a relapse, from which he died eleven days afterwards.

After two days halt at Roscrea the detachment came in by train to Birr to rejoin the head-quarters of the regiment. Nothing of any importance occurred among them until the night of the 13th April, six days after their arrival, when a little boy, 10 years of age, was suddenly attacked with strong fever and involuntary diarrhœa. I was not called to see him until nine o'clock next morning, when I found him with a hot burning skin; bowels continually moved without any previous notice; great prostration; thirst; a dark brown furred tongue; pulse small and quick, and his extremities covered all over with dark purple spots. At two o'clock P.M. I partly succeeded in arresting the diarrhœa, bilious vomiting then set in, which was copious, and continued until five o'clock P.M., when it ceased, he then became quite unconscious and comatose; and at seven o'clock P.M. same date, he died—the purple spots increasing in size and colour all the time. Duration of disease seventeen hours.

The treatment in the early stage consisted of Dover's and Grey powder, in small doses, together with stimulants. In the latter stage vomiting set in so violently that nothing could be given to him. I may here mention that this child's mother washed for some of the men who were out with the flying column; the room where she resided was well ventilated and not overcrowded.

Case 2.—On the morning following the day on which the case above alluded to occurred, there were two fresh attacks, one a young married woman, whose husband had been out with the flying column, living in a small room by themselves, which was well ventilated and not overcrowded. The other a recruit of ten months service.

The woman, when I first saw her, two hours from first attack, complained of a very severe pain in her head and back, and all over her body. Great thirst; tongue moist, and covered with a creamy substance. She speaks at times somewhat incoherently, and the body is covered all over with large dark purple spots; her husband states that the eruption made its appearance at the same time with the fever. After the administration of a strong mustard emetic she threw up nearly a gallon of bilious fluid which relieved the headache, and after a few doses of the diaphoretic mixture were given, a copious perspiration was established, which relieved her of the bodily pains. She progressed favourably, only requiring a mild purgative occasionally. On the third day severe pain in the forehead, left eye, and temple set in, accompanied with conjunctivitis and chemosis of left eye; two days later, after great suffering (which leeches and a blister did not appear to palliate), pus formed between the layers of the cornea, and vision has since been obscured. The purple spots, which were chiefly on the extremities, remained for three days before they faded away.

She is now convalescent, with the exception of the eye, and I am in hopes that she may yet partly recover her sight.

Case 3.—Pt. C., æt. 19, a recruit of ten months' service, of a delicate constitution, had not been out with the flying column, but slept in the same room with some of the men who had just returned from it, and whose washing was done by the mother of the dead child already alluded to, reported himself sick at nine o'clock A.M. On the morning of the 14th of April, while waiting to be called into the surgery, he fainted; he was carried into a ward and placed in bed, and as soon as he recovered a mustard emetic was given to him which brought away large quantities of bilious fluid. In less than an hour after admission he became quite delirious, and his lips and teeth were covered with dark sordes. It was not until a blister to nape of neck took effect that consciousness returned, and then he complained of pain in head, and all over his body; tongue very dry and brown, and the papillæ elevated; he also complained of intense thirst; there were some slight patches of purple spots, but not so visible as in the two former cases. The bowels were obstinately constipated, and two doses of haust. cathart. were given to him at intervals without having the desired effect. A large turpentine and oil enema was administered, which did not take effect for nearly three hours, when he nearly filled the night stool with a quantity of small black fœtid lumps resembling pills, which gave him almost instant relief, and he then passed a pretty good night. In the morning following he answered questions rationally enough for a short time, when his mind would wander again. The skin was now moist, but the dry sordes on tongue and lips continued; he complained of great thirst.

The above symptoms continued much in the same way for the next forty-eight hours, when he began to improve in every respect, with the exception of the thirst, which was still very great. He continued to improve steadily for the next seven days, until he imprudently exposed himself to a draught at the window, which brought on a slight relapse, but he is now almost convalescent.

In this case it will be observed how quickly the head symptoms made their appearance, and the obstinate constipation he suffered from; and, although he was not out with the flying column, his case, along with the others, go to prove that the contagion was imported by the men from Thurles, where typhus first made its appearance.

The next case was more interesting, and of greater importance, and presented other and different symptoms to those already described.

Case 4.—The patient was a lively, interesting girl of four years of age. About 3·30 o'clock P.M., on the 25th of April, she was suddenly attacked with violent headache, pain all over her body, particularly in the abdomen, a burning hot skin, a full and so quick a pulse that I could hardly count it. The parents gave her a warm bath, and at nine o'clock P.M., when they observed the child getting worse, they sent for me. I found the child suffering from the above symptoms, and very restless, a desire to vomit, but could not throw up anything, and the skin was covered all over with a purple eruption. A mustard emetic relieved her very much, as she vomited a large quantity of green bilious fluid, after which she slept, and passed a pretty good night. At nine o'clock A.M. I was informed that she was in a fit, and when I arrived she was just recovering from it, but I observed great muscular twitchings all over her body, particularly in her arms, legs, and those of her face. The arms were in a constant state of jerking, and her legs drawn up. These symptoms increased, and she was constantly raising her body up by her heels. She now required some person to be always in attendance on her to prevent her falling out of the bed; her face presented a wild appearance; the eyes staring, and the pupils much dilated; she did not speak, but constantly giving loud and short screams, and putting her hand to her head, indicating pain there; the bowels were opened but twice during her illness, and the discharge was very fœtid, accompanied with wind.

All the symptoms increased in severity, particularly the screaming. Muscular twitchings and restlessness, and the purple spots became larger and darker, and at 8·30 o'clock P.M. she died. Duration of disease seventy-seven hours.

The treatment adopted in this case was a mustard emetic at the commencement, followed by a diaphoretic mixture and purgatives; mustard poultices to forehead, back of neck, and spine; cold applications to the head; latterly, turpentine and oil enemas, ammoniated tinct.

valerian ; small and repeated quantities of wine, brandy and lemonade, for drink. All these remedies appeared to give relief, but it was only temporary, as the symptoms returned in a short time as bad as ever. The turpentine enema appeared to give the greatest relief. The valerian was not given until within eight hours of death, and the first dose produced perfect quietness for five minutes, but after that nothing appeared to give her relief.

Case 5.—The next and last case was a delicate little boy of eight years old. He took ill on the night of the 29th April, when he vomited and was purged ; but in the morning he got up, ate his breakfast, and went to school, where he had only been one hour when he was sent home ill. It was not reported to me until five o'clock P.M. that day. I found him complaining of great headache, and pains all over his body, a dry brown tongue, very hot skin, and he was covered with purple spots, countenance anxious, and the pulse full and quick. He became speechless at nine o'clock P.M., and was in spasms and convulsions all the night, and he was continually screaming. Towards morning he became better, the convulsive fits coming on only every second hour, but the twitching of the muscles were continuous, and there was muttering delirium. He remained so until the afternoon of next day, 2nd May, when the convulsive fits set in worse than ever, which continued so until 4·30 A.M. next day (the 3rd), when he died apparently in great suffering.

The twitchings of the muscles of his face and arms were very visible, and he was constantly jerking his arms and legs ; and the purple spots became larger and darker in colour. Duration of disease, from my first visit, fifty-nine hours, but from first attack fourteen hours more.

The treatment consisted of a mustard emetic, diaphoretics, turpentine and oil enemas, mustard poultices to forehead, back of neck, and spine, wine, lemonade, &c., &c.

The foregoing five cases occurred within the past month in these barracks during the prevalence of an outbreak of typhus and continued fever among the troops ; and, I think, it is clearly proved that it was not from defective ventilation, overcrowding, nor bad drainage, the disease made its appearance here, but entirely depending on the importation of it from Thurles by the men who had been there.

The first case (that of the child whose father had not been with the flying column, but his mother washed for the men who had been out) made its appearance during the time the first washing was being done after their return. The next was the young married woman, whose husband had been out, and afterwards they slept together; and the recruit, who slept in the same room with the other men who had been out. The origin of the disease in the two children last-mentioned can be similarly traced.

It is not my intention to make any comments on the nature of this new, but strange, disease. I shall leave it to those who have already seen something of it, and who have had greater experience.

The striking features of the disease are the febrile symptoms, and the purple eruption making their appearance almost at the same time, and the delirium setting in so soon afterwards.

Dr. GORDON read the following :—

On looking back upon the numerous cases of such illness which may be said to compose the present epidemic, the first circumstance calling for remark appears to me to be the preponderance in different cases of various sets of symptoms, in some almost entirely (at least on superficial examination) referrible to the nervous system, and in others, with at least equal partiality, confining themselves to the more obvious tokens of blood contamination.

To this fact we evidently owe the different nomenclature of the disease, cases of the first kind being termed cerebro-spinal meningitis, and of the latter, spotted fever or some other more formidable name.

It appears to me, therefore, to be desirable in the first place to decide, whether we are warranted in classing under the one name the various cases which have been met with, presenting either of those sets of symptoms, or whether we are to consider them as separate and distinct diseases. I will briefly relate two cases which have occurred to me since the publication of my remarks on this disease, in the *Dublin Quarterly Journal* of the 1st inst.

A lady, 37 years of age, was complaining for about a week of lassitude, occasional diarrhœa, want of appetite, nausea, and inability to manage her household affairs as usual. If she walked out she became giddy, and her head so confused that she had to return home immediately. Driving shook her so that she could not use this mode of exercise either. However, on Sunday, the 12th, she was induced to take rather a long drive to accompany her husband, who had been also unwell. The entire time she was out she was occupied shifting her position so as to get some rest for her back. When she came home she had to lie down, and applied all sorts of domestic remedies, soothing and counter-irritant, but without relief. At eleven o'clock I found her suffering great pain in her back, shooting forwards towards the epigastrium. This pain was most intense. She had also pain shooting upwards towards her head, in which she complained of great weight, and downwards towards her legs, which she said were powerless ; she had also a peculiar sense of constriction around the lower part of her chest, which grew. She was in a state of partial collapse, and the intensity of the pain seemed to be the only thing which prevented this from being complete.

She soon vomited—the vomiting was first the remains of food, which she had rapidly swallowed on her return from driving, under the idea that her distress arose from fatigue and hunger. It soon became watery and green, and was provoked by the least motion. This intense pain and vomiting continued for fully six hours. She got no sleep until seven o'clock in the morning, and then, on waking, she had cramps, pains down the legs, great sensibility of the surface of the body to alterations of temperature. This was obviously a case of spinal arachnitis, but there were also some few symptoms which, in my opinion, warrant our recognising it as a secondary affection. The condition of the pulse was some element in the diagnosis. It never assimilated the pulse of cerebral or spinal inflammation ; it never rose above 84, and this is, as far as I have been able to judge, a great peculiarity of this epidemic, as contrasted with typhus or typhoid fever—the comparative slowness of the pulse. We had here also a weakly acting heart, and immense sense of weakness, long after all collapse had passed away, and as the disease yielded to treatment, we had further confirmation as to the blood origin of the disease. The pain in the back and vomiting yielded at length to the extensive use of an exhorative of a a. L. C. C. and T. B., which produced most powerful counter-irritation, and, of course, allowed of the pre-absorption of the B. Since the irritability of the stomach has been allayed, wine and quinine are completing the cure. There were never any spots in this case. The following is a remarkable contrast to the above case :—

A young gentleman about 23 years of age having bathed when somewhat fatigued, was attacked with the usual symptoms of anorexia, and shortly afterwards his face and the upper part of his body was covered with an eruption somewhat like measles, but the patches were irregular in size and shape, they were dark coloured, they were rough looking on the surface, they could be more or less completely effaced by strong pressure, they were thickly interspersed with petechiæ, they spread gradually over the whole trunk, being most thick on the back, passed down the thighs, and have come out sparingly about the knees, and on the dorsum of the feet.

In this case the eruption forms the grand prominent feature (it is totally unlike measles, and may at once be excluded from the ordinary exanthemata by the mode of its development, and by its duration. It is still coming out on the lower parts, and has not yet disappeared from the upper part), the other symptoms of blood

contaminated are, as in the lady's case, a weak condition of the heart, a feeble but not a rapid pulse, 80 is about the average, but we have the following symptoms of a secondary affection of the cerebro-spinal meninges, corrugation of the brow, occasional pain in cervical region, sense of weight in head, occasional subsultus, nausea, and sometimes diarrhœa, with a furred and that peculiar symptom—a greenish tongue.

I bring forward these brief notes of these two cases, merely as examples of what I stated above the marked predominance of one set of symptoms in certain cases. The grounds then which, in my opinion, exist for our classing these two sets of cases under the one nomenclature are first, that in many well-marked cases we find the two sets of symptoms, if I may so speak, combined evidences of profound blood-poisoning, and proof of extensive cerebro-spinal meningitis; 2ndly, that although the indications of blood-poisoning may greatly prevail in one case, and the symptoms of lesion of the nervous centres in another, they never do so to the complete exclusion of the less obvious phenomena; and 3rdly, that mutatis mutandi, the same plan of treatment will cure the affection whichever train of symptoms predominate, due care being had to the probable secondary affections which the nervous centres may have to undergo.

What the general title should be, is another question altogether.

Wood—who, in the last edition of his "Practice of Medicine," gives a very satisfactory account of the disease—wishes it to be called *petechial* fever, as no other form is so peculiarly marked with true petechiæ, and as there is no other phenomenon more constantly present which can serve as a basis for nomenclature.

All physicians who have had opportunities of seeing epidemic fevers on a large scale, have met with typhus fevers without eruption, and typhoid fevers without eruption, and therefore the fact that cases have occurred of this epidemic without eruption can form no well-grounded objection to the title being adopted; but adopting another basis for our classification, we might perhaps, with more advantage, term it cerebro-spinal fever, as we call others, from the habitat of their quaint phenomena, gastric, isenteric, &c.

Dr. Lyons read the following:—

Case 1.—This case may be briefly noted. It is that of a youth in the prime of vigour, aged 19, fully developed; an energetic cultivator of athletic sports, and apparently in perfect health prior to the seizure which struck him down with such a terrible fatality. The details of this case I owe to the kindness of Drs. Clifford and Grant.

An officer, of one year's service, 19 years of age, full habit of body; sanguine temperament, and hereditary predisposition to head affection, reported himself sick, on Tuesday morning, April 16th, to Dr. Grant, stating that he felt bilious and out of order, and enquired whether he could go to the Regimental races (Baldoyle). As his tongue denoted slight disturbance of the stomach and liver, he was ordered a mild mercurial purgative, to be followed by a saline draught, and enjoined rest. Visited again at noon—found better and anxious for food. Ordered very light diet. Seen again at six P.M. The bowels had been freely moved; copious biliary evacuations; otherwise not much change. At eleven P.M. finding that there were feverish symptoms and headache, ice was ordered to head, and a saline diaphoretic. Dr. Clifford was then sent for, and on seeing him soon after, he found the headache continued, and that irritability of the stomach had set in, the matter vomited being dark purple, coloured with a slight amount of ropy mucus. Ice allayed irritation of the stomach, and he fell into a tranquil slumber for sometime; pulse soft, not frequent; skin moist and perspiring; on waking he was perfectly sensible, and did not complain much of headache; the rest was tolerable during the remainder of the night, and in the morning there was a marked improvement in all the symptoms; complained only of headache (frontal). At nine A.M., he was removed to a fresh bed, and left proceeding in a most favourable manner under charge of Dr. Grant. He continued tranquil for about half-an-hour, when he suddenly became restless, and was with difficulty restrained in bed. At eleven A.M. symptoms of congestion of the brain set in; small dark spots became now visible which had not existed before; the head symptoms increased rapidly and resisted all treatment (external). Internal treatment being impossible, as he could not swallow.

The treatment consisted in unloading the intestines and promoting secretion from the liver, watching carefully for head symptoms, applying ice, &c., &c., and when the congestion of the brain occurred, leeches to the temples, turpentine enemata, mustard sinapisims externally used and renewed over the spinal column, epigastrium, limbs, &c. Towards the end the action of the heart and strength of the pulse became gradually weaker; the respiration more impeded, and he quietly sank at about one P.M., having been insensible since eleven A.M. There was no retraction of the head.

There was no post-mortem examination made.

The body was seen at about 1·45, by Dr. Stokes and Dr. Lyons. The head and face, as well as the neck, were of a dark cyanotic tint. The surface of the body generally was not abnormally discoloured, but on the back there was a considerable amount of deep congestion of the skin between the shoulders, and down to about the waist.

Here and there upon the back, flanks, abdomen, calves of the legs, and inner parts of the thighs, were to be noted some dark, bluish-black spots, perhaps a dozen in all, some angular, more irregularly rounded, from two to three lines in diameter, unaffected by pressure, not prominent above the skin, and feeling firm to the touch.

Case 2.—For an opportunity of seeing the next case, I am indebted to Dr. Banon, who wished me to visit the patient with him, as he had not previously met with a case of this singular and appalling malady; it is but just to add that he had already made an accurate diagnosis and prognosis of the nature and formidable character of the disease under which our unfortunate patient was found to be labouring.

When seen by Dr. Banon and myself, at about 11.30 P.M., on the 24th April, she was found lying on a sofa perfectly unconscious, and wholly incapable of being roused, but she lay with her knees drawn up, showing that muscular power was not altogether annihilated; her breathing was very quick, about 40, short, and somewhat noisy; the pulse was all but imperceptible, and the heart's sounds were with difficulty heard by the stethoscope. The eyes were lurid; the pupils, of about medium size, were found to be wholly insensible to light. A clammy sweat covered the body; the feet and hands were cool, but had not quite lost all animal heat. The most notable feature about the case was beyond all question the presence of numerous dark purple spots, thickly strewn on the face, trunk, and extremities. They varied in size from that of a sixpence to that of a half-crown piece, and upwards, and here and there seemed to run into each other, while in various parts of the body the intermediate skin wore a general dark cyanotic hue.

The most active treatment, by external and internal stimulation, medicinally and otherwise, proved unavailing, and the patient died at about one o'clock A.M., on the 25th.

Little of an accurate character could be ascertained as to the history of this case. The patient was about 40 years of age; unmarried; a seamstress; she had pursued her avocations to the day of her fatal illness, and it was late at night when medical aid was first sought. This, in itself, is suffcient to show the insidiousness of the earlier symptoms, which were such as to raise little or no alarm, while, towards the close, the suddennes with which the eruption of purpuric patches was thrown to the surface, and the rapid supervention of symptoms of failure and depression of the vital powers, with the speedily fatal issue, mark, in a striking manner, one of the most characteristic features of this strange and terrible malady.

It may be worth while to note that the patient's mother, not unfamiliar, as we may presume, with sickness in many a form, repeatedly exclaimed, "Oh, this is the new disease. I'm sure 'tis the new disease," &c. Death took place in about thirty-six hours from the time at which any notable departure from health was observed.

Case 3.—I had the advantage of seeing this case in consultation with my friend Dr. Byrne. The patient was a fine, handsome boy, of about 11 years of age, of well-nourished frame. On the 24th April he took a long walk with a grown relation; towards evening he sickened and complained of headache, when some aperient medicine was administered by his friends. Later in the same night he was visited by Dr. Byrne, but until about twelve that night no spots of any kind were visible on his person. On the 25th he was seen by me in consultation with Dr. Byrne, who had at once, on seeing the spots, recognised the true nature and formidable character of the disease; although, to the ordinary observer, there was little about the patient to show the danger in which he was.

When seen at one P.M. on the 25th, his state was as follows:—He was sitting up in bed; made little or no complaint of headache, which he said was better; of sickness of stomach, for there was none; or of any other specific ailment of what kind soever; he was perfectly clear and collected; had a full, strong voice; could rise in bed, turn, help himself in every way, and wanted to be allowed to sit up; his chief inquiry was, "doctor, doctor, what are these spots?" pointing to numerous dark, blue, black spots on his arms and elsewhere. With such full possession of consciousness, and such an amount of muscular power as he retained, it was not a little surprising to find that there was a total absence of pulse, which was completely extinguished in both radials, and the heart's sounds were but faintly audible to the stethoscope.

The eyes were slightly injected, but the pupils were perfectly natural; the face was greatly discoloured, or rather somewhat dirty looking, with two or three angular spots on the left cheek, of blue-black colour, firm to the touch, unaffected by pressure, perceptible as lying in, above, and beneath the skin, and very much of the character of what are know as weals. These spots were found on the face, arms, forearms, backs of hands, on the trunk, and a few on the thighs and legs, which were generally somewhat of a cyanotic hue.

A mustard emetic was administered and freely taken, long retained, and at length but partially returned with no free effort at vomit, notwithstanding the aid of hot water. External and internal stimulation was freely employed, and all medicines and nourishment were readily taken and retained, but with no sensible improvement to his state. He was repeatedly seen both by Dr. Byrne and myself during the day, and all our directions were carried out with unflagging zeal. At about half-past six o'clock slight returning pulsation in the radial arteries could be faintly felt, but this proved only a fallacious symptom, and with little or no further change he sank at about half-past nine P.M., a little over twenty-four hours from the time when he first sickened, and less than twenty-two from the time the spots first appeared.

Of the three cases just cited it is to be observed, that as well as those previously recorded by me, all occurred in persons apparently in full vigour of health, with well developed and well nourished frames, of full habit, and in whom the adipose tissues abounded.

They are new to me in the character of the cutaneous spots and patches which they present. They all showed an absence of specific lesion of the nervous system. So far as I read aright their pathological indications, and long prior to their occurrence during their prevalence, and since I have had under careful observation, and treated numerous instances of the best marked specific lesions of the central portions of the nervous system and their membranes which this city has afforded.

Finally, I regard the pathological affinities of this strange malady to be rather in the category of those diseased states which include blood-poisoning, yellow fever, cholera, the effects of sun-stroke, than with those in which active hyperæmia in one stage, and lymphy or purulent exudation in another stage, is poured on the brain, cord, or their membranes. But I am quite free to admit that their are two distinct but occasionally mixed types of disease in the late epidemic. I regard the disease which I have described as the algide condition of a zymotic malady, and I propose to designate it Febris Nigra. I shall be prepared to discuss its pathology more fully when the proper time comes; I now give place to the able contributions which are to follow.

Dr. John Hughes read the following:—

Jane Traynor, aged 6 years, was admitted into the Mater Misericordiæ Hospital April 10th, 1867.

She went to bed on the night of the 6th in her usual health, and awoke next morning complaining of sickness of stomach. Afterwards she vomited, and both the nausea and vomiting continued up to midnight. Her mother also states that the surface of her body was then quite livid.

On the morning of the 8th dark spots were to be seen on her face, legs, and arms, and in the evening on the body also.

Dr. Montgomery, of Blessington-street, saw her on that day, and his description of her condition corroborates that of the mother. He also says that she was semi-collapsed, almost pulseless, and rather cold. On the night of that day her head was first remarked to be drawn backwards. The spine appeared curved and the legs bent.

On the 9th, there were no new symptoms, but those already existing were more strongly marked.

On the 10th, the day of admission, the above symptoms were very prominent—the retraction of the head, the arching of the spine, the flexed position of the limbs, the rigidity of the muscles, the extreme sensibility of the surface, and the pained and anxious expression of the face; the knitted brow, the suffused eye—were very remarkable, and plainly indicated cerebro-spinal disturbance.

Superadded to these symptoms, there was a peculiar eruption of dark-coloured livid, almost black, spots, over the entire body, except the neck and scalp. The eruption was, however, much more abundant on the face and extremities than over the trunk; and the size of the spots was also larger in the former than over the body, in some instances attaining the size of a sixpence.

Those spots were irregular in shape, but the smaller ones were circular, or slightly oval. In fact, looking at the child as she lay in bed, a superficial observer might not unnaturally conclude she was labouring under an attack of measles of an asthenic or malignant type.

It is hardly necessary to add that the pulse was extremely rapid, and occasionally imperceptible.

The heart sounds were natural; the body was wasted; the temperature low; sensibility of surface exalted; the eyes suffused; pupils natural, with little expression, and apparently diminished consciousness; bowels free, evacuations passed in the bed; great restlessness; incessant whining, and jactitation of the arms.

11th.—Pulse still incalculable, and occasionally imperceptible. Rested pretty well last night. No convulsions, nor any other appreciable change.

12th.—Pulse 138; she is not so dull; occasionally notices what is going on about her; she lies in bed quietly, but whining almost continually. The conjunctiva of left eye is more inflamed, and the eye looks dull; vision, however, is not impaired. Some portions of the rash are of a redder colour; a few, however, have become almost black, especially one, situated over the left elbow, of an oval shape, and surrounded by a red margin, which is nearly the size of a shilling.

13th.—Pulse 140; very weak; rested badly last night; continually screaming as if suffering intense pain; rash generally becoming of a reddish brown colour.

The cuticle over those spots which were noticed to be the darkest (almost black) is now raised by effusion of a sero-sanguineous fluid underneath it. The retraction of

the head and the arching of the spine are still strongly marked, fully as well as heretofore, although she appears somewhat more conscious, and calls occasionally for her mother, and recognizes the sister on duty in the ward.

14th.—Pulse 134, and fuller; on yesterday a vesicular eruption appeared on the shoulder, on the chin, and on the bridge of the nose. The former rash has assumed a brighter colour. She takes broth and milk freely; other symptoms unchanged.

16th.—Pulse 120, stronger; slept a good deal last night, and also to-day. The measly rash is fading, but the vesicular portion of it, which had previously ruptured, is replaced by a yellowish superficial ulceration surrounded by an inflamed margin. The eye is still inflamed, but does not look so dull. The upper extremities have completely lost their rigidity, and the head is less retracted; takes nourishment freely.

18th.—Pulse 100; rested well last night; is livelier and more sensible to-day. The head is still retracted, and the spine arched, but there is no rigidity of the muscles, and she allows herself to be placed in a straight position; the rash is fading everywhere, and there is now none visible on the body; the eye is clearing.

From this date forward her convalescence was uninterrupted though slow, and we remarked when every other symptom of her severe illness had disappeared, there was strabismus apparently of the left eye. Thinking that this affection might have existed previous to her present illness, we made particular inquiries of her mother, who assured us she never had anything wrong with her eyes, and in confirmation of that statement she is now fast recovering from that symptom.

The treatment I adopted in this case was free, and I may say very decided—counter-irritation over the scalp, with internal administration of codide of potassium and bark, at the same time supporting the system with wine and nutritious diet.

I looked upon this case as one of cerebro-spinal meningitis, to which was superadded this peculiar eruption. For all the most prominent symptoms pointed to such a lesion, and I was the more strengthened in this opinion from having had in the same ward two other cases shortly before, which presented almost all the same symptoms *without any eruption*, and ended fatally. *One* was a girl named Charlotte Smith, aged 11, who was admitted on the 1st, and died on the 11th of March. This patient had the retraction of the head, and arching of the spine with flexure, and rigidity of the limbs, suffusion of the eyes, convulsive fits, and other symptoms, referrible to the cerebro-spinal system, well-marked on her admission, and for a week before; and this condition of the spine; and muscular system was so permanent that the body could not be straightened, even after death.

On making a post-mortem examination the only lesion found was an effusion of serum into every cavity of the brain, and into the spinal canal without any trace of lymph or pus.

Another was Mary Hart, aged 7 years, was admitted from the dispensary on the 27th March, and died on the 8th of April.

She had been ill for a few days, but on admission had no special symptoms, except great dulness, listlessness, and depression of the vital powers, and loss of appetite.

On the third day the head became retracted, the spine arched, the limbs flexed and rigid, and she was seized with convulsions. Some days before her death she lost her speech and sight.

In this case no post-mortem examination was allowed; however, there can be little doubt we should have found pretty much the same appearances as in the case of Charlotte Smith who died some days before her admission, having had almost exactly the same symptoms.

(To be continued.)

Review.

THE POISONS OF THE SPREADING DISEASES.

By Benjamin W. Richardson, M.D., &c. London: J. Churchill and Sons.

This pamphlet consists of a lecture delivered before the congress on the sewage question at Leaminton, last October. Anything coming from the pen of Dr. Richardson is sure to excite considerable attention, and when, as in the present instance, he ventures positive statements that are to a large extent new, and the result of his own enquiries, we cannot better serve our readers than by furnishing them with a summary of his views. First of all then we are assured in this lecture that each of the spreading diseases depends on its own specific poison. Of all these the great type is snake-poison. Like that, each of the others may be separated, dried, again mixed with water, evaporated, &c. In the case of small-pox the poison is separated in almost a pure state by nature. In a dry state it is innocuous, but the moment it is moistened it resumes all its activity. In the same way all the poisons of this class dry solid, in which condition they are inert. All of them can be charged with water, and are then active, but they can be diluted to such a degree as thereby to lose their poisonous properties. The poisons are also transferable in vapour, and it is to a large extent through this, that a healthy person becomes attacked by being brought into the room of a person sick of these diseases. On the other hand, after death there is no longer vaporisation, but rather the reverse process of condensation, and Dr. Richardson, after special investigation, is convinced that the corpse of a patient who has died of one of these diseases is no longer infectious. There must be heat enough to carry the vapour.

Yet the heat must not be too great, for the poison of typhus is destroyed at 100° Fahr., and none of them can exist at a heat of 212° Fahr.

Besides dilution and heat these poisons are destroyed by oxidation. Their exposure to moist oxygen rapidly renders them inert. Ozonised or electric oxygen is still more rapid in its action. Chlorine is instantaneously destructive. Iodine and bromine are nearly as effectual as are also sulphurous and nitrous acids. Last of all, sunlight is very powerful. By experiment it has been shown that snake-poison is destroyed by sun-light, and that apart from the temperature.

To these facts we have to add that the poisons may be preserved artificially. Of the agents that preserve them cold is the most powerful. Besides this sulphur, creasote, arsenic, and perhaps other substances, will keep the organic poisons for an indefinite period. Lastly, these poisons cannot survive the process of decomposition. Thus, dissection wounds from recent bodies, are very serious, but a few days after death the poison is believed to have been destroyed.

As to the origin of these poisons Dr. Richardson traces them all to albumen, and holds that the changes in that body may be developed afresh in the human body. Should this be clearly established one could scarcely hope ever to banish all these diseases from the world.

The modes of communication of these poisons are all deducible from the properties already described, and as our space is limited we will pass over this, and briefly refer to the modes of destroying them—the methods of disinfection.

The best, easiest, and most natural is active ventilation. With this should be combined sun-light, which, like heat, destroys the poison. Dr. Richardson thinks that in a hospital for typhus, there could be no contagion if the patients were kept at a temperature of 100 Fahr. In a room of a temperature of 70, one dram of pulverised iodine, placed in a box and covered with a piece of muslin, will volatilise in the course of 24 hours, and destroy the poison there may be in the atmosphere. With a spirit lamp the metalloid may be rapidly diffused, but where this is not at hand placed in a saucer, and that put in hot water, the same effect would be produced. Iodine is much safer than chlorine, which, when he employs, Dr. Richardson furnishes in two-dram bottles, which can be opened, one at a time, at a distance from the patient.

Dr. Richardson also believes iodine to be the most effectual disinfectant to employ when the poisons are passing from the patient in a fluid state. For example, he would use it to disinfect the discharges of cholera and typhoid.

It is generally inconvenient to put the linen of patients into water at 212°. In this case they are better put into cold water first, as under 50° they are inert, then let them be put in a

room at 300°, with a good draft. If this cannot be done, let them be thrown into a cauldron of *boiling* water, not taken off the fire. With such precautions as these Dr. Richardson has never seen these diseases spread, and he says the poisons are harmless enough "if you know how to manage them." They may be isolated and kept for years. "You can put them in your pocket and carry them about, if you know how to treat them."

Lastly as to the utilization of sewage. This is believed by the author to be a point of very secondary importance to that of public health, which forms the side of the question to which this lecture is chiefly devoted. We have thus summarised the views of an able observer, and we refer all interested in the subject to the pamphlet under notice.

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The Medical Press and Circular.

"SALUS POPULI SUPREMA LEX."

WEDNESDAY, MAY 29, 1867.

THE RECENT EPIDEMIC IN DUBLIN.

We need scarcely inform our readers that within the last twelve months, a number of cases of a strange and peculiar character have occurred in hospital and private practice in the city of Dublin. The readers of our columns have not only been made aware of this fact, but have had set before them details and records of more than passing interest, and of grave importance.

These cases have been sufficiently numerous to be classed in a collected form as an Epidemic, and as one at this time peculiar to Ireland, and specially to its Metropolis, in which most of the recorded instances seem to have occurred.

On a recent occasion the Medical Society of the Irish College of Physicians discussed the subject of Cholera with an amount of dignity and ability which has been rarely equalled; and to The Medical Press and Circular was confided the important trust of publishing the numerous papers then read, and the brilliant and scientific discussion which followed them. The importance of facts and opinions so collected can scarcely be over-rated; and such, we have the best reasons for knowing, is the unanimous judgment of the Profession.

With regard to the recent or present Epidemic in Dublin, a similar course is being pursued; and we are thus able to-day to lay before the Profession facts which afford a most valuable addition to the literature of medicine. On Wednesday last, at a very crowded meeting of this Society, several papers were read; they were concluded at an adjourned meeting on Friday last, and were on that evening followed by a practical and lengthened discussion. All the papers and a full report of the discussion will appear in due course in our columns; and we therefore forbear expressing any opinion on the disease itself, or on the proceedings of the Medical Society regarding it.

So long ago as the 1st of April, 1846, Dr. Darby, of Bray, gave early information about cerebro-spinal arachnitis, in The Medical Press, and he was followed by the late Dr. Mayne, in the *Dublin Quarterly Journal* for August, in the same year. In The Medical Press and Circular for 16th May, 1866, Dr. Lyons, of Dublin, seems to have first published matter belonging to, or, at least, connected with the recent epidemic. In the following number, (23rd May), the same gentleman recorded a case of decided cerebro-spinal arachnitis. Again, in the very next number, (30th May), we published an undoubted case of the recent epidemic, which just then had occurred in the practice of Professor Banks, and we called attention to that case, and to the phrase, "Black Death," in connection with it, in a leading article. Further, on the 13th June, 1866, we published a case by Dr. Little, on the 3rd April, 1867, another by Dr. Ridley; and on the 24th of April a third, by Dr. Benson, jun. On the 1st of May, we gave the last published in this journal, that by Dr. Belcher, and we refer to it particularly, because it records references to the literature of the subject, which have not been given in connection with any of the previously published reports, which it to some extent summarizes.

The epidemic in question has been variously designated in our columns under the names of cerebro-spinal arachnitis, cerebro-spinal meningitis, febris nigra, and black death. The last of these names appears to us to be, if not a mere sensation title, at least specially calculated to mislead ordinary medical men, for the simple reason that the terrific title, "Black Death," is the legitimate literary designation of the universally known mediæval epidemic so clearly described by Hecker.

THE PURGATORY OF PERIPATETICS.

While many columns of the daily papers are being filled with descriptions of the wonders collected in the Great Paris Exhibition, and thousands of families are discussing their plans for visiting that International Show, it cannot be out of place for a medical journal to allude to the one inconvenience of crossing the Channel, which is present to the minds of a vast majority of the intending travellers, and, to not a few, may prove the only reason for staying at

home. Sea-sickness is an evil which few can afford to laugh at, and though usually it is but a temporary malady, subsiding almost as soon as *terra firma* is reached, yet, there are instances in which it undoubtedly originates or aggravates serious diseases. The strongest will, the iron constitution, the most highly-trained athletic system, are soon reduced to the helplessness of infancy by a toss on the briny billow. Careful preparatory diet and regimen, and the whole array of drugs, afford no protection, or have proved of such little avail, that they have all been discarded, and, for the most part, men have made up their minds that the only thing is to endure with such fortitude as they can the evil that seems the inevitable accompaniment of even a brief sea-voyage. The impotency of remedies to alleviate the suffering caused by so apparently simple a disease has pointed many a jest about the uselessness of the medical art, and too often furnished the crowning argument of that prevailing scepticism in drugs which is ever repeating the advice, "throw physic to the dogs." Even that section of the Profession which is constantly in contact with sea-sickness seems to have fallen into the same aquiescence in the powers of Neptune, and ceased to study the phenomena of the disease, in the hope of bringing them into subjection.

Among the thousand-and-one remedies that have been proposed, there is, however, one which, in a scientific point of view, towers above them all, and on which the Profession, as a body, is imperatively called to pronounce an opinion, and because nearly every one in large practice must have an opportunity of putting it to the test. With such patients as are about to visit the exhibition, we would seriously urge the duty of candidly considering its merits. If, as a Profession, we neglect or ignore this duty, we shall do an injustice to ourselves and to the public. If the remedy prove as efficacious as asserted, it will come into vogue with or without our leave or advice, and, in spite of us, we shall obtain the character of wilfully or negligently obstructing the progress of science. This is just one of those instances in which the public may take the investigation out of our hands; and yet we first of all ought to be prepared to say whether the proposed treatment be consistent with physiological science. It is not our intention dogmatically to pronounce for or against the treatment. Indeed, we are not accustomed to devote our leading columns to the advocacy of any therapeutical system, but we feel it only due to a most able physiologist to testify to the necessity of submitting his conclusions to the test of experience. No doubt many of our brethren who may cross to the channel to see the exhibition, or to be present at the Medical Congress, will be glad to avail themselves of the opportunity of trying the experiment, and those who may not be able to go themselves may as well give the necessary instructions to their patients. Thus, in a short time, sufficient facts may be accumulated to confirm the only really scientific theory which has been put forward, and that, be it remembered, a theory of the utmost significance in reference to other more important diseases, and which has been applied by its author to an elucidation of the pathology of cholera, epilepsy, paralysis, and other equally diverse conditions. The reader will of course have perceived, that the theory to which we allude is that of Dr. Chapman, whose reputation is not confined to professional subjects, and some of whose valuable physiological and medical contributions have appeared in our columns.

This being so, we need only, in the briefest manner, sketch the theory in question. Reasoning on the facts that had been demonstrated by Claude, Bernard, and Brown-Séquard, that a division of a portion of the sympathetic increased the flow of blood to the parts to which its branches are distributed, while galvanism of the nerve decreased the amount of blood in the same parts, Dr. Chapman directed his inquiries to the possibility of finding remedial agents that would depress or excite the action of the nervous centres. Such a depressant, he concluded, might be found in *cold*, while the opposite condition of *heat* should, *a priori*, act in a manner analogous to galvanism. Five years ago he put his conclusions to the test, by applying cold and heat to the spine, and so satisfied is he with the result, that he has not ceased during that time to urge upon the Profession his belief, that by varying the temperature of the nervous centres, we may, at will, diminish or increase the vital activity of those parts which derive their nerve supply from the portions on which we experiment. Reduced to its simplest and most practical form, the theory amounts to this, that we may vary the temperature of parts of the nervous centres, with the following effects :—By raising it, we increase the supply of blood to the part immediately acted upon, and thus exalt its activity ; thereupon, increased nervous influence flows outwards, so that the nerves, distributed to the blood-vessels, stimulate them to contract more powerfully, and thus reduce the supply of blood. On the other hand, by decreasing the temperature, we diminish the blood-supply of the part operated on ; this results in a diminution of activity, and so less nervous influence flows outwards, and the capillaries are allowed to dilate, such dilation, of course, admitting an increased quantity of blood in the part, and, as a consequence of this, giving rise to increased vital activity. In the same way as the sympathetic ganglia are acted upon by heat and cold, so, naturally, the spinal cord may be influenced in the same manner. The application of this theory to the treatment of sea-sickness, involves a consideration of the immediate cause of that distressing malady. Dr. Chapman is convinced that the "proximate cause of sea-sickness consists in an undue amount of blood in the nervous centres along the back, and especially in those segments of the spinal cord related to the stomach, and the muscles concerned in vomiting."

Dr. Chapman alleges that the pallor and coldness of the surface, characteristic of sea-sickness, are due to the contraction of the peripheral blood-vessels in the mode we have just explained ; that the cold sweat, and the copious secretion of mucus often excited from the stomach, are due to excessive stimulus from the spinal cord, which he affirms to be the efficient cause of glandular action, and that, as is well known, the spasms of the voluntary muscles, proceeding, in rare instances, to convulsions, are also due to hyperæmia of the cord. This hyperæmia of the nervous centres is caused, as he maintains, by the motion of the vessel acting on the brain, the abdominal viscera, and the spinal column, and, if the theory be correct, it is obvious, that by preventing the hyperæmia, we take away a segment of the circle, which must be complete in order to produce the disease. This he does effectually, if we may trust the reports of cases, by the application of ice along the spine.

RETURN of the number of Assistant-Surgeons (excluding Household regiments) borne on the strength of the British Army on the 19th day of March, 1867.—697.—T. G. Logan, Director-General.

Notes on Current Topics.

The Princess of Wales.—The medical gossips of London have been busy during the week with a variety of speculations respecting the probable effect of the late cold weather on the Princess of Wales. Every medical man is aware of the anxiety with which invalids and those who surround them are accustomed to regard everything which may affect the prognosis of the case, and we cannot feel surprised that such should be the feelings of the general public respecting Her Royal Highness. No material change has taken place since our last report, and the limb necessarily continues to be kept in absolute repose. The only element that can be called new since our last account is that of time, and as to that our readers will be able to decide for themselves how far the continuation of inflammation in the knee-joint for that period threatens a permanent loss of motion.

Sir William Lawrence.—Some improvement has taken place in the condition of this learned surgeon. One of his first acts after the seizure was to resign the Examinership of the College of Surgeons. Mr. Solly, of St. Thomas's, is likely to succeed. It may interest our readers to learn—as an instance of Sir William's extraordinary tenacity of work—that the day before his seizure he was at Bethlehem Hospital, and appointed the next day to perform an operation on one of the inmates. Those in charge were somewhat anxious on account of some delay in the preparations lest they should not be ready for the punctual surgeon, and were rather pleased at finding him behind time. Of course they learned later the reason he was not there at the time appointed. He continues under the care of Dr. Tweedie and Sir Thomas Watson.

The Fellowship of the Royal College of Surgeons of England.—We understand that the Examiners of the College are about to introduce a Practical Clinical test in Surgery into their examination, and with this object have asked permission from the managers of the Metropolitan Hospitals to examine in their surgical wards.

The International Ophthalmological Congress, which was to have taken place in Vienna in August, 1866, and was postponed on account of political events, will be held this year in Paris, on August 12, 13, and 14. A preparatory meeting will be held at the house of the President, M. Sichel, 50, Rue de la Chaussée d'Antin, at eight o'clock, on August 11.

The English Poor-rate Return.—The Poor-law Board has issued its annual return, from which it appears that the amount of poor-rates levied in the year 1865-66 was £9,573,772, and that the receipts in aid from other sources brought the total up to £9,958,250. Of this sum only £6,439,517 were expended for the relief of the poor, for in-maintenance, for out-door relief, for lunatic in asylums, workhouse loans, salaries, and other expenses connected with relief. All the items are larger than they were last year, except out-door relief. This exception was owing to the distress in Lancashire and Cheshire having subsided considerably since that time. The expenditure for out-door relief for all England constituted 49·7 per cent. of the total relief, but in the metropolis only 23·9 per cent.

Cholera.—Will the epidemic return this summer? To the indications already chronicled we may add that in the East, and particularly about Scutari, a tendency to spread has been noticed. Since the doubtful case or two that appeared in the weekly returns of London, several suspicious cases of alvine flux have been admitted to the metropolitan hospitals. In some of the Paris hospitals decided cases of cholera have been admitted lately. An Italian correspondent assures us that the Peninsula is not free from the scourge. These facts should suffice to set all our sanitary authorities to work. Are we better prepared to meet the enemy than we were last year?

The Commissioners of National Education and Sanitary Science.—Some months since the happy idea occurred to Dr. Cullinan (the chairman of the Ennis Town Commissioners), of procuring the circulation, as a reading-book or lesson-book, in the national school, of a manual of Sanitary Science. The body to which he belongs at once brought the matter under the notice of the National Education Commissioners, but nothing resulted until Captain Stackpoole moved in the House of Commons for copies of the correspondence. It then appeared that the Ennis Commissioners urged that the elementary treatise should be written by some accredited writer, and they suggested the names of Drs. Sutherland, Lankester, and Mapother. The Education Commissioners alleged that they were already preparing, with the aid of their own staff, a manual of Sanitary Science. Such has not yet however appeared, and the public has a right to demand that it shall be carefully prepared, and shall both, in accuracy of detail and simplicity of diction, meet the requirements of the pupils of our elementary schools. If the production of the Commissioners be deficient in these respects, we shall not fail to denounce the policy of trying to save expense, or seeking to aggrandize profits to their own staff, at the risk of that missing scientific accuracy and popular mode of expression, which this novel hand-book should eminently possess.

The Examinations at the Royal College of Surgeons of Ireland.—The Quarterly Examinations, which have just closed, have been conducted under a new arrangement, which has, on its first trial, proved eminently satisfactory as a test, and at the same time just to the candidate. Hitherto each of the Examiners has voted by "yes" or "no" on the passing of the candidate, and the majority of votes carried the decision of the Court. By a late ordinance of the Council this arrangement has been superseded, and the plan of voting by numbers substituted for it. The four Examiners are placed at separate tables. A candidate, accompanied by a member of council, takes his seat at each table. The examination lasts for a quarter of an hour, and, at its conclusion, the Examiner hands the Councillor his written vote, and the candidate passes on to the next. When the examination has terminated, the candidates leave the room, and the numbers of each are declared. The maximum number which any candidate can obtain from each Examiner is 15, or a total of 60 from the four Examiners. The minimum is 0, and if the gross marks of a candidate should not reach 20, he is referred back to his studies. Under this arrangement, 46 students have presented themselves at the first half of the examination, of whom 39 have passed, and 7 been rejected; and 22 for the second half, of whom 3 were rejected.

THE PRELIMINARY EXAMINATION OF THE ROYAL COLLEGE OF SURGEONS OF IRELAND.—At a meeting of Council, held on May 15th, the following resolution was passed, viz. :—"That the answering at these examinations be arranged as follows :—1st. Class certificate ; 2nd. Class certificate ; 3rd. Passed, but not classed. That the Examiners be empowered to recommend successful candidates for the two first of these honours, and that a special certificate, under the authority of the Council, be granted to them, which should be signed by the President or Vice-President, the Secretary of the College, and one of the Council.

THE REPORT OF THE ROYAL COLLEGE OF SURGEONS IN IRELAND.—The College held its annual meeting on Monday last to receive from the Council their report of the proceedings of the past year. The chair was occupied by the President, and there was a large attendance of Fellows and Councillors. In its own body the council has had several changes in consequence of the resignation of Dr. Arthur Jacob from his professorship, and from his seat as a councillor. Dr. Mapother, who was elected last June, of necessity vacated his seat in competing for the professorship of anatomy and physiology. In his place Dr. W. A. Elliott was chosen to serve, and on the resignation of Dr. Arthur Jacob, his son, Dr. Archibald H. Jacob, was elevated to the seat. The roll of attendances show that the council consider their position as a paramount claim on their time, for, with the exception of those gentlemen who were elected at a late period, or were debarred by ill-health, the attendance of members has been creditably regular. During the past year 16 Fellows, 104 Licentiates, and 11 Licentiates in Midwifery were added to the roll of the College, while 27 candidates were rejected in the junior, and 10 in the senior class examination. The College now possesses a roll of 2186 Fellows and Licentiates —a constituency many times greater than that of certain parliamentary boroughs. From the financial statement it appears that the College is in a flourishing condition, a sum of £700 having been lodged in bank, while a further balance of £400 remains to be carried forward to next account.

"THE CARMICHAEL PRIZE ESSAYS.

"At a meeting of Council, held on December 10, it was resolved—

'That Mr. Litton, the solicitor of the College, be authorized to consult Mr. Lawson, Q.C., respecting the enlarging of the subjects of the Carmichael Prize Essays.'

"At the same meeting it was also resolved :—

'That the usual notices be given on Monday next, in the public prints and medical journals, for the reception of Essays for the Carmichael Prizes, subject to the conditions of the testator's will.'

"THE BRITISH MEDICAL ASSOCIATION.

"At a meeting of Council, held on August 2, it was resolved—

'That the Council having learned that the British Medical Association intends to hold their anniversary meetings for 1867 in Dublin, it is resolved, "That the Secretary be directed to write to the Secretary of the Association, to inform him that the halls, libraries, and museums, and lecture rooms of the College, shall be thrown open for their accommodation.'

"DR. JACOB'S RESIGNATION OF THE PROFESSORSHIP OF "ANATOMY AND PHYSIOLOGY.

"At a meeting of Council, held on January 15, the following letter was read, viz. :—

'Croydon, 13th January, 1867.

'GENTLEMEN,—Being convinced that I cannot with confidence rely on my power to deliver the Lectures on Anatomy and Physiology next Session in the College School, I think it will be more for the good of the College and the benefit of the pupils, that I should resign my Professorship now, which I hereby do accordingly, after fifty years' service as an anatomical teacher, forty of them as the Professor of Anatomy and Physiology in your College. You will, I am sure, agree with me that the period has arrived for the performance of this act. —I have the honour to be, your very obedient servant,

'A. JACOB.'

"Proposed by Dr. Hargrave, seconded by Dr. Adams, and unanimously resolved—

'That we, the Council, having received a letter from Dr. Jacob, resigning the Professorship of Anatomy and Physiology, which he held for so many years with so much honour to himself, credit to the College, and educational advantages to the numerous students who have pursued their studies in the College School, it is with feelings of deep regret we accept it.'

"DR. JACOB'S RESIGNATION OF HIS SEAT ON THE COUNCIL.

"At a meeting of Council, held on March 7, the following letter was read, viz. :—

'March 5, 1867.

'MR. PRESIDENT AND GENTLEMEN,—Being assured of the benefit which I derive from complete physical and mental relaxation at my present place of residence, I have determined, on due consideration, to relieve myself permanently of active professional labour.

'Feeling, under these circumstances, that I ought not further occupy the position in the adminstration of the College with which I have been so long honoured, I beg to lay before you my resignation of the office of Councillor.

'It may be believed that I have decided on this course with much anxiety for the maintenance of those interests which I have so long endeavoured to sustain, and with much regret at a separation from my colleagues, who have so friendly and cordially acted with me in upholding those principles which I now leave with confidence in their hands.

'In retiring from personal connection with the Council of the College, I cannot divest myself of the interest which I have taken in its affairs, and it will afford me much satisfaction if, by any means of communication, I can make available such information as my long official relation to the College has enabled me to acquire.—I have the honour to be, your grateful and sincere friend and Fellow,

'A. JACOB.'

"The election having been held as above, Dr. Archibald H. Jacob was duly elected a Member of Council, in room of Dr. Jacob, resigned."

"TESTIMONIAL TO DR. ARTHUR JACOB.

"At a meeting of Council, held on February 21, it was resolved—

'That it be referred to the Finance Committee, and report to the Council as to the best means of expressing their sense of the benefits conferred on the College and the School by the long, eminent, and successful services of Dr. Jacob.'

"In accordance with the foregoing resolution, the Finance Committee brought up the following report on March 7 :—

'Your Committee, anxious to give effect to the wishes of the Council, recommend an address be presented to Dr. Jacob, to express their regret that the state of his health has compelled him to resign the chair of Anatomy and Physiology, and his seat on the Council, which he has so long filled with credit to himself and the College.

'That a portrait of Dr. Jacob be placed in the Board-room of the College.

'That a piece of plate, not less value than one hundred guineas, be presented to Dr. Jacob, as an additional testimony of respect and gratitude for his services.'

"The report having been read and unanimously agreed to, it was proposed by Dr. Colles, seconded by Dr. Hargrave, and resolved—

'That the Finance Committee be empowered to carry the resolutions in the report into effect, and to give such publicity to the same as they may think fit, subject to the approval of Council.'

"At the same meeting it was also resolved—

'That Mr. Catterson Smith be engaged to paint a three-quarter portrait of Dr. Jacob for the College.'

"At the same meeting the following address, about to be presented to Dr. Jacob, was read, agreed to, and ordered to be engrossed and signed by the President, Vice-President, and the Members of Council :—

'Sir,—We, the President, Vice-President, and Members of Council of the Royal College of Surgeons in Ireland, beg leave to express to you our sincere regret at the loss we have experienced by being deprived of your valuable services in the conduct of the business of the College, and in the teaching in the School attached thereto.

'We are fully sensible of the great amount of time, talent, and labour you have so long and so disinterestedly devoted to advancing the best interests of the College, to maintain its privileges, and to enlarge its sphere of usefulness.

'We also gratefully acknowledge that your exertions in teaching the important subjects of Anatomy and Physiology, during a period of more than forty years, have materially conduced to the success of our School, whilst your contributions to Science have made your name illustrious amongst those who have enriched our art, whereby you have enhanced the fame of Irish Surgery.

'We earnestly hope that your life may long be spared to enjoy the well-merited repose which voluntarily you have sought, and are anxious that you should bear with you the satisfaction of knowing, that the College is deeply grateful to you for your earnest, long-continued, and successful labours in its behalf.'

"To the President, Vice-President, and Members of the Council of the Royal College of Surgeons in Ireland.

Gentlemen,—I have had the pleasure of receiving your very kind expression of regret at the loss of my services in the conduct of the business of the College and the teaching in the School, as well as your expression of belief that my labours have been disinterestedly devoted to advancing the best interests of the College, to maintaining its privileges, and enlarging its sphere of usefulness.

"If I have been successful in my endeavours to accomplish these objects it has been owing to my firm reliance on the judgment and independence of the Council, supported as it is by the Fellows at large, and therefore am I convinced that the College will continue to flourish as heretofore, notwithstanding the change to which these observations refer.

"Allow me to add, that although I can no longer discharge the duty of Councillor, I shall at all times, as long as I live, be prepared to place my services at the disposal of the College, be their value what they may ; and so I remain your friend and colleague, A. Jacob.

"Professorship of Anatomy and Physiology.

"At a meeting of Council, held on February 21, Dr. Mapother was unanimously elected Professor of Anatomy and Physiology in the School of the College, in room of Dr Jacob, resigned.

"Professorship of Botany.

"At a meeting of Council, held on March 21, 1867, Dr. Minchin was elected Professor of Botany in the School of the College, in room of the late Dr. Arthur Mitchell."

CHORLTON UNION HOSPITAL.

We have several times mentioned the magnificent hospital lately built by the Guardians of the Chorlton Union. Mr. T. Worthington has forwarded us a pamphlet, with plans, comprising his account of it recently read before the Manchester Statistical Society, and which shows him to be a correct writer as well as an able architect. The population of the Chorlton Union has now reached 180,000, and the large workhouse hospital, built only ten years ago, has already become too small—a clear proof of the rapidity of increase in the population of this part of the kingdom.

The building just erected is on the pavilion plan, and consists of five oblong blocks or pavilions, connected at the southern end by a long, open, arcaded corridor, forming a means of communication between them all.

This building was commenced in 1864, and is now in full working order. Mr. Worthington seems to have devoted all his energies to the work, having, in order to place himself in the best position to acquire information, visited some of the largest European hospitals.

The result does him infinite credit, and we cannot do better than avail ourselves of the information contained in the pamphlet before us :—

"Each pavilion is three stories in height, and contains on each floor a ward 124 feet long, and 24 feet wide, with beds for 32 patients. At the southern or entrance end are a spacious open staircase, a nurses' room 12ft. × 11ft., a ward scullery 12ft. × 10ft., a water-closet for the use of the nurse and attendants, and a hoist to raise food to the upper stories ; at the northern end of the wards are two small projecting wings, one of which contains two water-closets for the patients, a sink for cleansing the bed-pans, and a closet for brushes, &c. ; the other contains the bath-rooms, lavatories, dust shoot, foul linen shoot, &c., &c.

All the above accommodation is repeated on each of the three floors ; so that there are, in each pavilion, three wards of 32 beds each : making a total of 96 beds in each of the five pavilions, or 480 beds in all, with the several minor rooms just enumerated.

The heights of the wards are as follows :—

	14ft. 6in.	clear	ground floor.
	14ft.	,,	first ,,
Average	15ft.	,,	top ,,

The top ward is somewhat higher than the others, being partially in the slope of the roof.

The number of *cubic feet* of air space to be allotted to each patient, being of the first importance, was a subject of the most careful and anxious consideration.

The Chorlton Guardians discussed this point at great length. All thought of adopting the old standard was abandoned. It appeared desirable that such an air space should be allowed as would be likely to effect the most expeditious cures, and the most rapid removal of cases from the parish books.

It was ultimately determined that each inmate should have an air space of 1350 cubic feet or thereabouts, which is more than double the minimum space required by the Poor-law Board, and about three times that allowed in several of the larger Metropolitan workhouse hospitals.

In the east and west walls, or the long sides of the wards, are placed a series of large windows 4ft. 8in. wide, and extending from 2ft. 9in. above the floor to the ceiling. These windows are in all cases facing one another, and are divided in their entire height into three sub-divisions.

The lower portion, for about three-fourths of the whole opening, consists of an ordinary double-hung sash ; the upper fourth is pivotted, and works on a swivel with cords, to open at any desired inclination. On the top of this swivel-light, and, in fact, forming a portion of it, is a continuous hopper-shaped frame, made of cast iron. This frame extends the entire width of the window. It is glazed at the front and ends, but a space at the top is left open about two inches wide and the full length of the frame. This long narrow opening is covered with fine wire gauze, and admits a constant but imperceptible stream of the outer air, which is continually passing across the ward close to the ceiling, towards the corresponding opening in the opposite window. A slightly upward direction is given by the sloping form of the hopper, in order that the air may be thrown towards the centre of the apartment, and be so distributed as to avoid down currents.

Any or all of the three divisions may be opened more or less, at the discretion of the attendant ; but when all are opened to their full extent, the ward will in a very short time be flooded with fresh air.

Besides this, however, there is the opportunity of obtaining a current from the two extreme ends of the ward, and flushing the upper part with fresh air without opening the doors.

This is effected by means of a glazed louvre, about 6ft. high and 4ft. wide, placed at the entrance end, over the door from the staircase ; and at the other, or balcony end, by means of a large swivel window, similar in arrangement to those already described. The louvre, which is worked by a very simple mechanical contrivance with lever and screw, may be adjusted to admit more or less air as required, but practically they are very rarely closed.

There are also, at various points in the walls, air shafts or flues discharging above the roof level ; and the ventilation is further assisted by a considerable number of small air grids or channels built in the walls, at short intervals, close to the ceiling. These

grids have a sloping lip on the inside, projecting about five inches from the wall, with an inclination of about 45°, to prevent the air falling at once in a cold volume to the lower part of the ward. A corresponding grid is placed in the opposite wall in each case, and the air appears to take a direction generally across the ward, near to the ceiling. The air being thus admitted in very small quantities and at very numerous places, diffuses itself without perceptible draughts, and displaces the gaseous portion of the contained air which naturally rises to the top.

The form of the small air channels is such that they would hardly be observed if not pointed out, and are therefore not likely to be wilfully obstructed, especially as they are close to the ceiling, and therefore out of reach.

In the floor of each ward, at a distance of six feet from the outer walls, are a number of hit-and-miss gratings, with galvanized iron horizontal tubes or flues, to conduct the fresh air to the foot of the beds, should it be required in foul cases, or when it may not be desirable to open the windows.

On the ridge of the roofs are revolving ventilators of large diameter, to promote the ventilation of the top wards, which are partly in the roof, so that the windows do not reach the highest part of the ceiling.

Each ward is lit at night by three suspended rings of gas-burners, over which a funnel-shaped cowl is suspended, which terminates in an iron flue communicating with a shaft in the wall, by means of which the products of the gas are carried off, while at the same time an upward current is caused and a further impulse given to the ventilation during the night, when the windows are usually closed.

The *warming* is effected entirely by means of large open fire-places, three in each ward.

The water-closets are contained in the left wing, and are extremely simple in construction and very inexpensive. The entire basin and seat are of earthenware, without wooden seats or fittings. The cleansing is affected by means of a chain attached to the door, which raises the valve and flushes the basin each time it is used.

A sink or trough for emptying the bed pans adjoins, and has a similar earthenware basin with a lead receiver on the top, flushed by means of a hand-pull. The divisions between the closets are of sawn slate slabs about seven feet high, with a frame-work of cast iron; non-absorbent materials generally have been used where ever possible in this department.

The baths are placed detached from the walls, so that a patient may be supported on both sides, are of Stourbridge fire clay, lined with a coating of porcelain, and the supply of water is constant. Hot water, though heated in the ward scullery at a distance of 140 feet, can at all times be obtained without drawing off cold stagnant water from the pipes. The divisions here, as in the water-closets, are of sawn slate. Adjoining are the lavatories, consisting of large earthenware basins with polished slate tables; and hot and cold water is always ready.

In one corner of this wing are taps of hot and cold water for washing purposes, and for filling the portable baths; and a two-inch fire-plug and hose are fixed in this wing on each floor.

Here also are the dust shoot and the foul linen shoot: the former of cast-iron, with hopper and door on each floor, discharging into an ash-pit outside the building; and the latter of wood, discharging into a ventilated chamber in the basement. These two shafts adjoin, and are carried up about 8 feet above the roof, with a revolving ventilator 2 ft. 6 in. diameter on the top, to prevent any foul or stagnant air accumulating in the shafts.

The Manchester Corporation convey the water to the workhouse by a special 7-inch main, which entirely surrounds the whole of the hospital buildings, having fire-plugs placed between every pavilion, both at the northern and the southern ends, besides in other convenient positions, and the pressure from the mains is sufficient to reach to the roof in case of fire. Ten tanks, one on the top of each of the wings just described, each containing 2500 gallons of water, are supplied by rising mains 3 in. in diameter: so that when filled, 25,000 gallons of water are stored for the use of the hospital.

The hot water apparatus has been contrived with great care, and is ingeniously arranged on a plan suggested by Mr. Ward, the contractor for this part of the work. The boiler and hot water reservoir are in the small ward kitchen on the ground floor, and the hot water piping is carried, as before mentioned, to the wing containing the baths and lavatories, a distance of about 140 feet. The whole of these pipes are wrapped in thick coarse felt to prevent frost having effect on the water; and the entire system of piping may be emptied in the basement in case of repairs or extreme frost.

The drainage is entirely outside the buildings; and in no case is a drain brought within the walls, except to receive the descending soil pipes or waste water pipes. It is throughout of glazed earthenware.

In the three principal chimney stacks in each of the five pavilions there is a special flue built, discharging above the roof, to which the drains are connected for ventilating purposes. This flue is entirely independent of any other, but is placed between two smoke flues, which by their heat cause an upward current in the intermediate flue, and by this means the drainage is ventilated at 15 points. On the top of these flues charcoal boxes will be placed, to destroy any gases which may rise from the drains.

The food hoist or lift is in the staircase adjoining the ward sculleries. It is constructed on a very simple principle, and works with great precision. It is provided with a break, so that the lift may be checked at any required point.

The cost of the five pavilions with the corridor, as above described, including the gas and water supply and the various fittings referred to, has barely exceeded £23,000.

HARVEIAN SOCIETY OF LONDON—May 9.

Dr. J. E. Pollock, President.

THE PREVENTION OF VENEREAL DISEASE.

Present:—Mr. W. Cooke, Mr. Acton, Dr. V. Bazire, Mr. Curgenven, Dr. Chas. Drysdale, Dr. Tilbury Fox, Mr. G. Gascoyen, Mr. J. Lane, Dr. Maudsley, Dr. Meredyth, Mr. Sedgwick, Dr. Steele, Mr. Teevan, Dr. M'Loughlin, Dr. Beigel, Dr. Hjaltelin, and Dr. Vintras.

Reports were read by the Honorary Secretaries as follows:—

Mr. Squarey reports from University College Hospital, that the average daily number of venereal cases seen there, is 9; in the proportion of 1 to 3·3 of the total number of surgical cases seen. Venereal patients are not admitted into the hospital.

Mr. Moore reports from St. Mary's Hospital, Paddington, that the daily average of venereal patients at that hospital is 14, or about one-fifth of the surgical out-patients daily seen. "Saint Mary's Hospital does not profess to treat venereal disease." There are no beds for such cases in that hospital.

Dr. Nankivel reports, that at the Chatham General Hospital, there are no male venereal beds, but 40 female lock-beds under the Contagious Disease Act. He adds, "my appointment dates from Christmas, 1866. The following results I have taken from my own out-patient book. The total number of fresh entries in my out-patient book, for the quarter ending March 31st, 1867, amounted to 527, of which 133 were surgical, and 35 were venereal, according to the definition supplied in this form. I shall be happy to see the Honorary Secretaries of the Harveian Society, if, at any time, they should desire to prosecute the inquiry on the spot."

Mr. Vincent Jackson reports from the Wolverhampton General Hospital, that there is a daily average of 11 venereal patients seen at that hospital, or about one-sixth of the strictly surgical cases. No beds are set apart for venereal diseases.

The report from the West London Hospital gives a daily average of 5 male and 3 female venereal patients, or about 1 in 8 of the surgical patients. There are no beds for venereal cases.

The report from the City Hospital for Diseases of the Skin, shows that in the month of April, there were 17 new cases of syphilitic disease seen—10 males and 7 females, or one in 8 of the new cases seen during that month.

Dr. Rayner reports from the Islington Dispensary, that "as patients are only admitted by Governors' letters, distributed personally, a case of venereal disease is a rarity. Not more than forty such cases came under treatment in a year."

Mr. W. Smith reports from Portland Town Free Dispensary, that it is "one of the rules of the institution, that no one afflicted with venereal disease can be admitted as a patient."

Mr. R. W. Dunn reports, that of 1280 surgical cases seen by him at the Farringdon Dispensary, 159 were venereal—60 males and 99 females, that is, 1 in 8 of the cases seen by the Surgeons.

In a letter from Mr. Spencer Smith, that gentleman says, "the only part I could have taken in your proceedings would have been that of congratulating the Committee of the Harveian Society, (and, therefore, the Venereal Disease Committee),

upon the advanced views which they have so decidedly adopted with regard to prostitution."

In reply to circulars sent by Mr. Curgenven, Mr. Thornburn, Secretary to the Medical Section of the Royal Manchester Institution, Mr. John Cardell, of Salisbury, and also the Secretary of the Southampton Medical Society, sent letters to signify the readiness of the several Medical Societies of these towns, to co-operate with the Committee of the Harveian Medical Society.

Dr. DRYSDALE said that he regretted that there were no reports as yet from the King's College Hospital, from St. Thomas', from London Hospital, from St. George's, Charing-Cross, or Westminster Hospitals. He hoped that the insertion of this fact in the journals would obtain the desired returns. The report, too, from the Middlesex Hospital, was very imperfect, and merely said, that "a correct reply was impossible, without much labour devoted by all the medical staff, the cases being dispersed all over the wards." There are eleven venereal beds in the hospital.

Mr. ACTON said that not many years back, no venereal cases were admitted either into the Middlesex or the London Hospitals, and in the former, payment was exacted when such cases were treated in former times.

The PRESIDENT hoped that the reports from the Middlesex and London Hospitals might soon be obtained.

The following extract from a letter from Dr. Steele was read, dated

"Guy's Hospital, 9th April, 1867.

"I have made some inquiries with the view of aiding your object, and will detail to you, in the rough, what results I have been able to obtain. You will observe, from my last year's report, that there were nearly 60,000 out-patients treated at Guy's. Of that number, 36,600 were enrolled as ordinary surgical cases; 14,800 as ordinary medical cases; 2500 as diseases of the eyes; 700 as diseases of the ear; and 700 diseases of the skin; while the remainder was made up of cases which could have no possible connexion with venereal diseases—to wit—minor accidents, tooth extraction, and midwifery cases. The relative number of venereal cases to the ordinary surgical cases is very large, averaging, from the opinions of the assistant-surgeons, not less than two-thirds of the total number daily seen, or 24,000 of the cases entered under this heading. I am informed that, amongst what are termed ordinary medical cases, the estimated average is not more than five per cent.; among diseases of the eyes, ten per cent.; and of the ear, about five per cent.; among diseases of the skin, four-fifths of the cases are attributable to venereal taint, whilst amongst the diseases peculiar to women, examined by the physician-accoucheur, I am informed that those are not less than ten per cent. connected more or less with these diseases. This would give a rough total of 25,800 cases of venereal diseases treated in the out-patient department in the course of the year, or forty-three per cent. of the total number of persons entered on the books. With regard to the in-patients, my answer refers only to patients suffering from syphilis, who are placed in the venereal wards. There are, doubtless, many more in the hospital suffering from sore-throat, caries of the bones, rheumatic pains, &c."

Dr. STEELE observed that the remarks made in the above letter were only true in the rough. It would require several weeks to make them more accurate.

Mr. WEEDEN COOKE remarked on the extreme frequency of venereal diseases in Guy's.

Mr. ACTON said that when he formerly made some inquiries, he found the proportion to be nearly one-half venereal cases to all surgical out-patients in St. Bartholomew's Hospital.

Dr. DRYSDALE said that the proportion at the Royal Free Hospital was put down as three to eight; and at the Metropolitan Free Hospital, as one to three of the surgical out-patients; but Guy's was the heaviest proportion.

Dr. MACLOUGHLIN begged to ask the Committee whether he might be allowed to state his opinion that there was no such thing as a contagious venereal disease. He believed that there was no such thing, and that the eruptions called syphilis, and the discharge called gonorrhœa, had nothing to do with contagion, but were accidental.

Mr. ACTON said that, as the Committee were all of opinion that there were such diseases, he hoped that the President would not have this question discussed, as he was obliged himself to leave soon, and wished to say a few words on the matter of police registration before he left.

The PRESIDENT observed that, as this Committee were assembled for the express purpose of endeavouring to check the amount of contagious venereal diseases in this country, it was evident that Dr. Macloughlin's question was taken for granted by the Committee, and therefore could not be discussed.

Dr. MACLOUGHLIN said that he had been invited to attend the Committee, and, as he was not to be allowed to discuss this fundamental point, he thought it needless to remain. He therefore begged to retire.

Mr. ACTON then said that he could not help thinking that the Committee should not be in too great a hurry to carry out the Contagious Diseases Act of 1866 among the general public, as the majority had decided to do. The most important duty of the Committee should be to collect, as they were doing, statistics sufficient to show the enormity of the evil, and the necessity for something being done. It was by no means certain that objections to the Government measure would not soon be heard of, even among military circles. He thought the Committee too much ignored the religious party. There was a religious party who only, he believed, wanted a case to take up and make an outcry about, in order to prevent the Contagious Act being carried out. He had had much experience of that party. Would it not be better to pause a moment before committing themselves to any decided measures. Were the results so remarkable in the army?

Mr. JAMES LANE said that the results of the Army Act were already admirable. Although the Act had only come into operation in October last, the amount of disease at Woolwich, was only half already of what it had been, and consisted, in a large proportion, of cases of gonorrhœa. The examinations as yet had been confined at Woolwich to the women suspected of being diseased. No objection was made by the prostitutes. He believed, of course, that the matter would be by no means so simple in London.

Dr. BEIGEL said that he had heard, with surprise, the reports from so many hospitals and dispensaries, stating that venereal disease was not treated in such hospitals. So long as this was the case, it was no wonder that the diseases were so common as they were in London. He (Dr. Beigel) had been for many years connected with the Charité Hospital of Berlin, during the lifetime of Dr. Baerensprung, and he must say that the forcible examination of women had not seemed to him so beneficial as was supposed by many. Some of the women were nearly all the year in hospital in Berlin. They went out for a time, got fresh infection, and came back; but not before they had infected many in the interval. In his opinion, facility of admission into hospital was the most important measure to be initiated, and was far more important than forcible examinations and registration which, as before said, his experience did not warrant him in recommending very greatly.

Mr. ACTON asked how long it took in many instances to cure gonorrhœa in a woman. Three months in many cases are not enough, and after that, even, she would infect a man. He was not so anxious as Dr. Beigel, either, to increase the number of venereal beds. This would cost too much to be entertained. The great point was to show the frequency and importance of venereal diseases to the public. As to the carrying out of the police examinations of prostitutes, one fact would show what might happen, and might raise an outcry which would retard the question indefinitely. When in Paris, a year or two ago, he attended the police examinations, when a young woman was brought in to be registered. She was a virgin, and the Committee could quite understand what an alarm would be raised if such a case took place in London.

Mr. JAMES LANE said that the Committee had determined not to make the examinations similar to those on the Continent. It might be true enough that in some cases gonorrhœa could not be cured under less than three months; but in most cases the discharge ceased in three weeks or so. It was only, however, by the speculum that the health could be known to be good.

The PRESIDENT asked Mr. Acton whether it was not true that the troops in Belgium were almost free from disease, whilst the English troops were most severely affected with venereal disease. Was not this an argument for police supervision of prostitutes?

Mr. ACTON replied that this was quite true, and in 1859, when he inquired, out of 3500 troops quartered at Brussels, there were only 11 cases of venereal disease; whilst out of 600 Fusileer Guards in London at that epoch, there were no less than 64 cases.

Dr. DRYSDALE said that the Committee had, with the exception of himself and Dr. Chapman, already voted in favour of registration and forcible examination of prostitutes.

Dr. FOX said that the Committee's object was the prevention of venereal disease, not the regulation of prostitution.

Dr. MAUDSLEY said that, without forcibly examining notorious prostitutes, nothing could be done towards the prevention of venereal disease.

Dr. HJALTELIN, Superintending Medical Officer of Iceland, said that there were in Iceland, with a population of 70,000 persons, neither prostitutes nor any venereal disease. All prostitutes were summarily shipped off when they came to the island. Of course this was not a practice which could be imitated by other countries.

Dr. BEIGEL said that women were liable to punishment for infecting men in Germany.

Mr. W. COOKE asked if this held good for men too.

Dr. BEIGEL thought not.

Mr. SEDGWICK observed that it would be of great importance to find out the amount of venereal disease treated in metropolitan workhouses. He believed from experience that it would be found to be very large.

Mr. CURGENVEN said the Committee hoped soon to obtain returns from the workhouses.

Mr. WEEDEN COOKE said that this was the largest of the questions raised. At the Royal Free Hospital they were inundated with poor diseased women from the workhouses. He wished to know whether these cases were treated at all at the workhouses, or were they neglected? He believed the latter.

Mr. SEDGWICK said that the latter view was correct. Women with venereal disease were looked on by the workhouse authorities as having forfeited their right to relief, and were thus sent from pillar to post, infecting right and left, until received into some of the more generous hospitals.

Dr. CHARLES DRYSDALE said that the result of the observations of Dr. Beigel, Mr. W. Cooke, and Mr. Sedgwick, and the reports which he had read from various dispensaries and hospitals, had convinced him how ill-judged the system was at present pursued in many institutions, with regard to the admission of the important class of contagious venereal diseases. What avail would any superintendence of prostitutes be, so long as there was no room for treating diseased persons, and no inclination to do so, save in the hospitals of Guy's, St. Bartholomew's, the Lock, and the Royal and the Metropolitan Free Hospitals, with a few others? He therefore proposed this motion: "That this Committee is of opinion that the present bye-laws obtaining in some of the hospitals, dispensaries, and workhouses of London, and other cities in this country, and which prohibit the entrance into hospital or treatment of venereal diseases, tend greatly to spread contagion, and ought, if possible, to be altered." Perhaps the opinion, if adopted, might act morally on the authorities.

Mr. TEEVAN seconded the motion, since it might perhaps stir up the members of various hospital staffs to represent to the governors the necessity of erasing such bye-laws. Every one knew that in many hospitals no venereal case is allowed to remain, if known to the Committee, and, until any general provision was made for diseased prostitutes, by the proposed extension of the act of 1866, he thought the passing of such a resolution desirable. Another remark he would make was, that it was ill-judged in the army authorities to force soldiers to enter hospital when affected with venereal disease, because they were confined and put on spoon-diet, the consequence of which was that when he was house-surgeon to University College Hospital, a number of soldiers from Knight's-bridge came to consult him, instead of going to their own surgeons, and these men said that it was common for men to consult chemists, &c., in order to avoid being sent into hospital.

Mr. JAMES LANE opposed the motion as being almost a stultification of the motion passed on the last meeting. If the Contagious Diseases' Act were extended to the community, one of its provisions would secure sufficient beds for persons with venereal diseases.

Dr. STEELE also opposed the motion. Many governors would not subscribe to charities if venereal patients were admitted.

Mr. GASCOYEN said that with regard to what had fallen from Mr. Acton, he thought, in the first place, that public opinion had much changed of late, and secondly, that we stood much in need of hospitals for the treatment of venereal disease. It might be true that some cases of gonorrhœa would require three months to cure, but, on the other hand, as the case of the more formidable disease, syphilis, if condylomata were seen and attended to, all danger of infection could soon be put aside by treatment. The workhouse infirmaries at present were not large enough to receive venereal cases, whatever they might be made.

Mr. WEEDEN COOKE observed that provisions should be made in Mr. Hardy's bill for carrying out the provisions of the act of 1866, as far as having sufficient beds for venereal patients.

Dr. C. DRYSDALE withdrew his motion as the sense of the meeting seemed against it. At the next meeting reports will be read from the *Dreadnought* and the workhouses, if received.

IMPORTANT PROSECUTION UNDER THE MEDICAL ACT.

THE CASE OF R. J. JORDAN.

THE proceedings of the London College of Surgeons against Robert Jacob Jordan, on which we commented last week, have resulted by the magistrate fining the defendant £20—the highest penalty he could inflict. Notice of appeal was given, and a case was allowed for the Court of Common Pleas, although it may be doubted whether this course will be really pursued. We furnish our readers below with a summary of the proceedings:—

The defendant, Robert Jacob Jordan, of George-street, Hanover-square, appeared, in answer to a summons, before Mr. Mansfield, at the Marlborough-street Police-court, "for unlawfully pretending to be, and taking and using the name, title, and description implying that he was recognised as a surgeon."

The Hon. A. Thesiger was for the prosecution; and Mr. Keane, Q.C., and Mr. M. Williams (instructed by Mr. Edward Lewis), were for the defence.

There was a second summons taken out by the Royal College of Physicians, Edinburgh, for a similar offence.

Mr. Thesiger said this was not the case of a man who had merely infringed the statute by holding himself out to the public as possessing the proper qualifications, but a man who had been a member of two honourable societies—that of the Royal College of Surgeons in England, and the Royal College of Physicians in Edinburgh—from which he had been expelled, and then openly braved the Society by keeping open an anatomical museum, the description of which must shock every mind possessing a particle of feeling or propriety.

Mr. Keane—If the defendant is to be tried for these alleged crimes, let him be charged at once with them.

Mr. Thesiger—The magistrate had a discretionary power as to the penalty, and therefore, if he proved the facts he should lay before the Court, he trusted the highest penalty would be inflicted.

After some formal evidence as to the laws and register of the Royal College of Surgeons, and the membership of the defendant,

Mr. Thesiger then said that at the meeting of the Council a resolution was come to expelling the defendant as a member of the College.

Mr. Stone proved delivering to the defendant a letter, written by Mr. Balfour, dated the 27th April, 1863, to the effect that by direction of the president he had been removed from the list of members, and asking him to deliver up his diploma. He (Mr. Stone) removed the defendant's name from the list of members immediately after the meeting of the Council. He produced the medical register for different years with the name of the defendant in it; but the defendant's name did not appear in that for 1867. He asked the defendant to give up his diploma when he delivered the letter, and, thinking he might like, before doing so, to consult his friends, told him he would call again, and did so, but the defendant refused to deliver up his diploma, nor had he done so up to the present time.

Mr. Thesiger read a letter from the council, which had induced the council to pass a resolution to the effect that, in consequence of the defendant distributing certain books, and advertising in the papers his "Vita Vitalis," he was to be expelled.

George Russell, a detective serjeant of the City Police, said that in consequence of instructions he had received from Messrs. Wilde & Co., on the 3rd April he went to the defendant's house, and saw on the door "Dr. R. J. Jordan." He rang the bell, and the door was opened by a porter. He asked the porter whether there was a museum, and he said there was. He asked what was the admission, and the porter said "One Shilling," and the porter gave him a catalogue, and said the museum was on the first and second floors, and he went up. He saw a document which he believed to be a diploma. It was dated the 4th February, 1859, and signed with the names of Green, Arnott, and Smith, the names all apparently in different handwriting. As he was coming down from the museum he saw a gentleman he believed to be the defendant, but he was differ

ently dressed. He went again on the 5th April and saw the defendant. He asked if he had a work on debility, and he said he had, and that it was a shilling, and he purchased it. The defendant said if he would wait a short time he would give him a book of extracts from his larger work, and, after a minute's waiting, he fetched him the book produced, but he did not charge him for it.

In answer to Mr. Keane, the Witness said he did not go to the defendant's owing to nervous debility, although the defendant might have thought he did. He went by direction of the solicitors. All he said to the porter was, "Is this a museum?" The defendant said nothing to him about the diploma at any time. He did not affect to consult the defendant. He told him he thought he had a friend who suffered from debility. He asked the defendant the best time to see him, and his charge, and he said in the middle of the day, and his charge was £1. The "friend" was merely a fiction. The defendant did not draw his attention to any part of the books. He did not ask the defendant if he was a legally-qualified practitioner, neither did he say he was. The books had not been in his possession ever since. He signed them before giving them to the solicitors.

Mr. Thesiger said that was the case for the prosecution.

After some discussion the further hearing of the case was adjourned till Thursday.

On which day the Council for the Defendant, Mr. Keane, made a most able speech in reply to the evidence given on the preceding day of trial. He said, looking at the evidence, no case was made out within the statute. He commented strongly on the language used towards Mr. Jordan by Mr. Thesiger, which he contended was far beyond professional licence; pointed out that Mr. Jordan had been removed from the books of the College for four years, and that from that time to the present he had been committing the same offence—if an offence it was—without anything being done by the College of Surgeons. He wanted to know why that august body had been so sleepy for so long a time, and now had become so lively, as, in effect, to say to Mr. Jordan, "Pay us £20 for what you have been doing against the Medical Act." What was it that the College charged Mr. Jordan with? Why, that he had published what they said was a disgusting book. But he was here reminded of Swift's remark, "that the nicest men were usually the men of the nastiest ideas," and that remark might now be applied to the College of Surgeons. He had himself looked through the book complained of, and could not for the world see anything that was indecent in it. The book might be improved in style, no doubt, but it was less explicit in details than other medical books to which no exception had ever been taken—the work of Tissot, for instance—a book full of learning, but full of that kind of information that would be a hundred times more dangerous to young people than any of Mr. Jordan's publications. The learned council then entered upon a series of technical points, the effect of which was to range the objections under four heads—first, that the College of Surgeons had no power to expel a member in respect of matters on account of which they had removed the name of Mr. Jordan from the list of members; secondly, that, assuming they had power, their proceedings were irregular, and that no proper expulsion had taken place; thirdly, that the words of the section of the act did not comprise a case like the present; and fourthly, that even supposing that the act did, the fact of the diploma being left in the possession of Mr. Jordan for so long a period constituted such an aquiescence as brought the case within the ruling of "Ellis *v.* Kelly," and afforded ground for a belief in Mr. Jordan's mind that the expulsion of the College was an illegal act, and that he was consequently entitled to style himself, and was in fact, at the present time, a member of the College of Surgeons. He could not help animadverting upon the way the evidence had been got up. The College had sent a disguised detective to Mr. Jordan's house. He did not blame the detective, for that was his line of duty; but he did blame the College of Surgeons, and must describe their conduct as mean and unworthy of them. The College of Surgeons had elected Mr. Jordan after an examination, and had given him a diploma. There was then no question of Mr. Jordan's qualification, by education, to practise as a surgeon; but the College had thought fit to except to certain works, published by Mr. Jordan, and to his keeping a museum. They had, in the plenitude of their assumed power, struck Mr. Jordan's name from the register, and demanded back the diploma, with which demand Mr. Jordan plainly said he would not comply. Neither the books in question nor the museum had been proved to contain anything indecent. No evidence whatever to that effect had been given, and therefore the conduct of the College of Surgeons was not regular in taking the steps they had taken. It had not been pretended that Mr. Jordan had held himself out as being on the register, and as taking fees under that title. If that could be proved, then Mr. Jordan might be indicted for obtaining money by false pretences, but no charge of that kind had been made, because it could not be sustained. These proceedings were only an attempt on the part of the College of Surgeons to get what they never had, the power of punishing a man by summary conviction. With respect to the refusal to give up the diploma, he maintained that Mr. Jordan was justified in doing this, as he believed that he had been improperly removed from the register, and that he considered their order to be a nullity. Mr. Jordan had a right to say he had done nothing derogatory to the dignity of the College or the profession, and therefore that the College had no right to remove him. Mr. Jordan had adopted a certain theory of medicine, and because he had been unusually successful he had excited professional jealousy, and hence the present proceedings. If the College wanted to get back the diploma, why did they not take legal steps? Why did they allow it to remain in Mr. Jordan's possession for so long a period? Mr. Jordan did not want the authority or licence of the College of Surgeons; he could do, and had done, without it. He had what that College had acknowledged by granting him this diploma, that of which no human power could deprive him—the ability and the necessary qualifications for practising the profession he had adopted. In conclusion, he contended Mr. Jordan had not pretended that he was on the register, or held any office which rendered registration necessary, and therefore that the case had not been made out.

Mr. Thesiger having argued the legal points raised in the course of Mr. Keane's speech,

Mr. Mansfield said he had listened attentively to the arguments on both sides, the charge against the defendant, brought by an important body, being that the defendant Jordan had falsely used the name and title of surgeon. It appeared in the course of the arguments, different Acts of Parliament and bye-laws having been referred to, that the Royal College of Surgeons claimed and exercised certain powers. The case before him, to a certain extent, resembled cases that came before courts-martial, the accused being charged with doing something unbecoming to the profession, and the Court being called upon to decide whether the charge was sustained or not. It was stated that some charge had been made before the College of Surgeons. He did not go into the question of the charge being right or wrong. The College had decided that it was proved, and they exercised their power of dismissal. It appeared that in exercising this power, the person so dismissed became *ipso facto* deprived of the power of exercising his profession. If this was so, the matter became very simple. He must presume that the College of Surgeons was an authorised body, that they had power to make inquiries, and that everything they had done had been rightly done. He was to presume that Jordan had done something—that he had held himself out as a practising surgeon, he not being a surgeon recognised by law, namely—a member of the Royal College of Surgeons. Now, he apprehended, that whatever might have been Mr. Jordan's former position with respect to the College, his status as a surgeon was put an end to from the date of the resolution passed by the College of Surgeons. Whether they came to that resolution rightly or wrongly, he had not to determine. The fact stood uncontradicted—that the defendant Jordan did put into the hands of the witness Russell, certain books, in which he (Jordan) was described as a member of the Royal College of Surgeons, and as having a diploma. In doing this the defendant represented himself to be what he was not, and so far the charge was proved. He offered no opinion on the point whether the College of Surgeons had power or were right in dismissing the defendant; or whether the College, by a resort to a higher Court, could be compelled to reinstate him. But there could be no doubt that under the circumstances the defendant could not be recognised as a surgeon by law, and the judgment must be, therefore, against him. The defendant would have to pay the full fine of £20.

Mr. Keane asked for a case.

Mr. Mansfield consented to give a case for the Court of Common Pleas.

The College has discharged a duty to its members and the Profession in its prosecution of the notorious Robert Jacob Jordan. The state of the law has not empowered

them to do more than purify their body of the taint of such association, and the penalty of £20—which is the extreme punishment within the power of the Court—will probably have no effect in putting a stop to the infamous proceedings complained of. The proceedings in the case were simply a legal proof of the authority of the College to demand the return of the diploma, and evidence that the demand was refused, and that Jordan still represents himself as a member of the College. There was no defence or denial of the charge, and the appeal, of which notice was given, must be, we presume, on some point of law. The prosecution of the Royal College of Physicians of Edinburgh is fixed for hearing on Tuesday next.

The selection of Jordan as the subject for prosecution is a curious and instructive comment on the law as it at present stands. That person has laid himself open to the penalty simply by having at one time desired to acquire real professional knowledge. He is singled out for punishment because he was a Physician and a Surgeon; because he had pretensions to professional capacity; and if he had been as impudent a swindler as his colleagues who practice without any pretension whatever to competency, he would have escaped, as they have done, at the blind side of the law.

We offer this enigma for the solution of the Medical Council now opening its annual session in London; and we venture to press upon that body the enquiry as to whose fault it is that such is the case.

Nine years after the whip has been placed in their hands to scourge such jackals from preying on the public, it is found powerless in their weakened grasp.

OBITUARY.

DR. BLACK OF EDINBURGH.

This gentleman expired at his residence in Edinburgh on the 30th of April last. He had devoted a long and active life to the service of the Profession—commencing his professional studies in 1806, and being appointed an assistant-surgeon of the Royal Navy after the usual examinations in 1809. Twelve months afterwards he was sent to the West Indies in the *Raven*, sloop of war, as surgeon to that vessel, and at the end of the war was placed on half-pay. He then commenced private practice at New Stewart, but soon removed to Bolton, in Lancashire, where he was appointed one of the physicians to the Infirmary and Dispensary. Here he remained till 1839, when, for family reasons, he settled in Manchester, and was chosen Physician to the Manchester Union Hospital, and Lecturer on Forensic Medicine in the medical school. Some years after this he returned to Bolton again, and as years increased upon him, he retired altogether from practice and spent his last years at Edinburgh.

Dr. Black distinguished himself in various ways. He took his degree of M.D. at Glasgow in 1820, after that he became L.R.C.S., Edinburgh, and in 1860 was admitted F.R.C.P., London. He was rather a voluminous writer, and belonged to several learned societies, in which his attainments and services were always honourably acknowledged. His life was active and devoted without intermission, until the infirmities of age compelled him to relinquish his public engagements and betake himself to a quietude befitting his declining years.

Correspondence.

CHEMIC ELECTRICITY.

TO THE EDITOR OF THE MEDICAL PRESS AND CIRCULAR.

Sir,—In my last letter on "Chemic Electricity" (a term which I have adopted for defining more exactly its origin and *modus operandi*) I endeavoured to be as concise as possible, your space being limited; but as it seems from a letter, which has lately appeared in your journal, that my meaning has been misconstrued, you will be kind enough, I trust, to permit me to add a few more observations on that subject.

I have adopted as my motto, that "nature alone is my guide," and, according to natural phenomena, I will now describe an electric battery of Nature's own make, which, like her other productions, will be found to be upon a grand and vast scale. (The following observations are borrowed from the work of Dr. Pallas, Medical Inspector to the French Military Hospital in Algeria):—

This natural electric battery is known by the name of volcano. Its cell consists of a subterraneous cavity, containing various substances, most of them metallic. Volcanoes are near the sea-shore; and when it happens that the salt-water penetrates through a fissure, a crevice, or any other aperture, into the cavity, then oxydation takes place. (I may observe, *en passant*, that formerly we used to employ salt-water for exciting our batteries, instead of sulphuric acid, as at present.) Now, "chemic electricity" (as has been shown already) is the result of chemical decompositon, or is generated by it. Let us follow, then, the process, as it takes place. The salt-water penetrates into the hole, or cavity, which contains certain mineral substances: these oxydise, and then decompose. Heat is now evolved; incandescence increases, progressively, until ignition takes place; the substances become fused; and gases are generated. These, when they preponderate in too large quantities to be contained within, ignite, and make their escape through the aperture, which then serves them as a flue.

These are occult processes, which cannot be witnessed by the bodily eye; but which can be readily pictured to the eye of the mind.

Every kind of natural phenomenon, indeed, is the result of definite and immutable laws, and is effected upon certain conditions, which, when they meet, always give the same issue. Whether they are visible or not, things are, because they must be.

If we are asked, what is the meaning of "spontaneous combustion?" I answer, that it is produced by the causes above-named. When King Louis Philip was returning, many years ago, from paying a visit to Her Majesty, a railway building took fire. This accident caused a profound sensation at the time; for it was suspected to have been intended as an attempt upon the king's life. But the building was uninhabited. Who, do you think, was the guilty party?—It was chemic electricity. The building had been closed for a long time. It contained the refuse of greasy rags, tow, and other old materials. These fermented, were decomposed, and ignited like the flames of a volcano.

What, again, is the spontaneous combustion of the hay-rick, so common in the country?

Thrust your hand into the middle of a rick, when the weather has been showery, and the hay has been stacked before it was thoroughly dried: you will not be able to endure the heat. But, pass a current of oxygen through it, and you will see how rapidly it will blaze!

Are not these various phenomena the results of one and the same cause? Who can deny it? If, then, the same cause is existing in the human body, can we deny that it will also produce like effects, modified only, according to the constituent difference between the two bodies—the animate and inanimate. For, in the animate body, the liquids preponderate by nine-tenths over the solids, and the current of pure oxygen is also precluded—that gas existing only in given conditions, and mixed with four parts of nitrogen, in such proportions, as not to be injurious.

This statement may appear startling to those who have not followed me, or who have not studied the subject. They may also think it absurd to illustrate the functions of the body by a volcano or a haystack! I must beg leave, then, for the sake of such readers, to enlarge more on the subject than might otherwise have been necessary.

Nature is very punctilious, and very precise in her laws; nor will she brook any infringement of them with impunity. Some persons might consider this very "ridiculous" and absurd. But it matters not. No individual man, nor all the united inhabitants of the earth, will ever be able to change one iota of her laws. She governs the universe; and to seek to introduce into her government a reform bill, would be chimerical indeed.

Amongst other laws which nature has established for regulating the action of the body, is that which determines its normal degree of heat. This degree is, according to some, 98 of Fahrenheit; while Liebig places it at 99·25, a variation, however, which in no way invalidates our statement.

A mean standard of heat, then, has been established by

nature for the living body. When this standard is altered, the change, either *plus* or *minus*, becomes a cause of disease. If it is raised, the effect is hypersthenic; if it is depressed, the consequence is hyposthenic. As, therefore, the best remedies in either case are those which most readily restore the equilibrium, or the normal status of the organism, it cannot, I think, be denied that, among these, none surpass that of electricity.

I will illustrate my position with a fact.

One of my patients, a lady, had been summoned away from London upon urgent family business. When she returned to town she was labouring under the cold stage of ague, and shivered in a warm bath at a temperature of 100°. I raised the temperature to 108, and increased, at the same time, the quantity of electricity. I then made the patient pass successively through the three stages of fever, which was thus cut off at once, and did not re-appear.

Thus, my method supersedes the *chrono-thermal system* of Dr. Dickson, which, as a theory, though certainly founded upon logical principles, does not succeed in practice. The reason is this, that there is no drug which can instantaneously modify the temperature of the whole organism. I make this assertion with the greater authority, because I had, as a patient, a gentleman who was a great admirer of Dr. Dickson, and followed his treatment for five years, without being cured.

I could depend upon his statements, therefore, as he was very well informed, and a man of acute perception.

I think I have now said enough to show that the immutable laws of nature ought, on all occasions, to be the guide of the medical man, who, if I am not mistaken, should devote more ime and attention to the study of natural philosophy, or, in other words, to the real book of nature, than to reading works which contain the speculations, and oftentimes the erroneous theories, of man, who, notwithstanding his lofty intellect, can never outwit nature herself.

In my last paper on Electricity I promised to treat of the second kind of natural electricity, the atmospheric; but the hints with which Mr. Thompson kindly furnished me, induced me to try to be more lucid and explicit for the future. This attempt I have now made; for, if a writer is not understood, it often happens that he is made to say what was furthest from his thoughts.

I shall beg leave, then, in conclusion, to add a few words concerning a discovery relating to electricity, but very little known.

Dr. Pacini, of Pistoia, in Italy, discovered along the nerves of a hand, which he was examining, some little whitish bodies of an elliptic shape, which had never been observed before. He thought at first that they were, perhaps, indurated molecules of the cellular tissue, and did not pay further attention at the time to the subject.

But some while after he again reverted to the matter, and determined, if possible, to ascertain what was their real character.

He found that they were connected with the adjacent nerves, and came to the conclusion that they were not integral components of the nervous system, but were anomalous formations of a pathological type. With this explanation he was satisfied for a time, but upon prosecuting his researches further he discovered that there was in the healthy and normal subject a systematic arrangement of corpuscles in the fingers, the hands, the toes, and the feet, as well as round some of the joints. He then arrived at the opinion that these little bodies were intended by some means or other to render more perfect the sense of touch. After him in 1833, Dr. Andral Camus Lacroix, having occasion to prepare some anatomical specimens for a competitive examination for the professional chair of anatomy, made the same discovery.

In 1836 Mr. Cruveilhier found out that those corpuscles do not belong to the nerves, nor to their ganglia. Some other medical men have also turned their attention to the same subject, but have not succeeded in explaining either their functions or their use. They were all agreed, however, that they were *not* nervous ganglia, inasmuch as no nervous filaments, either afferent or efferent, could be detected in them. Meanwhile, Pacini was persevering in his experiments. He dissected the corpuscles, ascertained that they had no structural connection with other organs, and that they were of a peculiar formation, which differed from all other components of the body. He found them to be elliptic cells—cells within cells—dovetailed, so to say, in with each other, while the intervening space between each was filled with a whitish transparent fluid; and ultimately he discovered that the apparatus of these bodies were of the same construction as the electric organ of the gymnotus electricus, the torpedo, and other electric fish.

M. C. Beckensteiner, a German electrician, who has devoted many years to the study of electrical phenomena, has followed up, with admirable perseverance, Pacini's discovery. After dissecting numerous corpuscles by aid of the microscope, he gave a perfect anatomical description of them, and also proved their identity with the electric organs existing in fish. This is but a cursory, and necessarily a very imperfect sketch of Beckensteiner's description, which occupies fifty-nine pages of his work. But, it will be sufficient to prove that electric apparatuses exist in all the upper classes of the animal creation. One point still remains to be cleared up. That is, the precise use and function of these corpuscles.

Dauglison, in a short notice which he gives of the "corpuscula paciniana" in his valuable Medical Lexicon, informs us "that their uses are not known."

In my humble opinion, these corpuscles are the *recipients, or reservoirs of chemic electricity*. They are distributed over all those parts of the system which are subject to the greatest amount of chemical action.

If at some future time you are not so pressed for space by your many contributors, I shall be happy to treat of atmospheric electricity, and the nervous ganglia. I shall then have the opportunity of again alluding to Pacini's corpuscles, and trust to be able to prove the difference between the physiological action of chemic and atmospheric electricity. The former pertaining especially to the organs concerned with the chemical action and formation of the tissues. The latter, to the nervous system, as controling the phenomena of motion and volition.—I am, sir, faithfully yours,

J. Caplin, M.D.

COUNTY AND CITY OF CORK MEDICAL PROTECTIVE ASSOCIATION.

TO THE EDITOR OF THE MEDICAL PRESS AND CIRCULAR.

Sir,—A memorial from this Association, of which the enclosed is a copy, was entered on the minutes of the Medical Council of Great Britain on the 29th of May last, having arrived too late for consideration in connection with the question of Medical Education. As the memorial is expected to be again before the Council at its sitting this year, may I beg the favour of you to give it the wide circulation, which a place in your Journal will secure for it.—I remain, sir, your obedient servant,

Charles Armstrong, Hon. Sec.

[COPY OF MEMORIAL.]

"To the President and Members of the General Medical Council of the United Kingdom.

"The Memorial of the County and City of Cork Medical Protective Association,

"Respectfully Showeth:—That your Memorialists look foward with deep interest to the measure which they understand is likely soon to be introduced into Parliament to amend 'The Medical Act' of 1858.

"That this Act must be looked upon as having, up to the present time, fallen short of what was expected from it, in its two principle objects, viz.:—The protection of the Public, and a really improved system of Medical Education.

"That with respect to the first of these objects, its appears to your Memorialists that Registration must continue to be all but nugatory, unless the new legislation render it imperative on the Council to order, through duly authorized officers, the prosecution of all persons incurring the penalty specified in Clause XL. of 'The Medical Act;' or that which may be substituted for it.

"That the vastly more important object of securing a sound and adequate education for all candidates for Medical and Surgical qualifications, is not, in the apprehension of your Memorialists, likely to be attained whilst the powers of the Council continue to be limited, as they are at present. To be enabled efficiently to provide for the country a body of properly qualified practitioners, it appears to Memorialists that the Council should be empowered to prescribe and enforce such educational regulations as may be found requisite for the attainment of that important object.

"That no education, Memorialists respectfully submit, can be considered sound and adequate, which does not include, as preliminary to entering on medical studies, properly so-called, such a course both literary and scientific, as will enable the student effectively to master the varied subjects of professional study with which he will have to grapple, and afterwards, to take such a position amongst men of general information, as will

be calculated to maintain for Medical Science the estimation in which it is desirable, for the good of mankind that it should be held.

"That the course for a degree in Arts in the different Universities, should, in the opinion of your Memorialists, be preliminary to that for a degree in Medicine, and that a course of education, embodying both classical studies and the various branches of Physical Science, should be indispensable before entrance on medical and surgical Education of whatsoever character.

"Wherefore, your Memorialists would respectfully suggest the expediency of the Council seeking for such a modification of Clause XLI. of 'The Medical Act,' as will secure the prosecution of offenders against its provisions. But especially of seeking for the power to establish a uniform Curriculum of Studies, preliminary and professional, which shall be binding on all the educational bodies of the country.

"And your Memorialists, &c."

ON THE THERAPEUTIC ACTION OF HENBANE.

TO THE EDITOR OF THE MEDICAL PRESS AND CIRCULAR.

SIR,—I shall occupy no more of your valuable space than to say, briefly, that if Dr. Caplin will re-read my note of March 20th, I think he will see that the dilemma in which I am placed with regard to henbane consists in this—that I am still doomed to meet with practitioners who continue to believe in the medical fables of therapeutic powers of this drug, as old, perhaps, as Paracelsus, notwithstanding all modern advances in knowledge to the contrary; and that the light I wished thrown upon it, is not that pale light of the moonbeams under which this "precious remedy" should be gathered to acquire certain fabulous properties and flourish; but the light held up by that French Commission to which I referred, for the special benefit of others.—I have the honour to be, sir, your very obedient servant,

J. CAREY, M.D., London.

Medical News.

ROYAL COLLEGE OF SURGEONS OF ENGLAND.—The following were admitted Members of the College at a meeting of the Court of Examiners on the 21st inst. :—

Edward Scudamore Angove, Camborne, Cornwall; H. Schofield Baldwin, M.D., Queen's Univ. Irel., Burnley, Lancashire; Thomas Benjamin Briscoe, Calcutta; Henry Estcourt, Manchester; George Purdey Field, Sussex-gardens; Frederic Anthony Helsdon, North Walsham; Christopher Haynes Jenner Hogg, Birmingham; William Leonard, Shefficld; Charles Augustus Robinson, Kingston, Jamaica; Frederick Charles Shaw, Hampstead; Henry Goldsworthy Shorter, Hastings; Henry Murray Steele, Harrington-street; Frederick Henry Waylen, Haverstock-hill; Thomas Edward Webb, Aylesford, Kent; John Campbell White, Prince's-street, Westminster; William Edwin Williams, Llanhilleth, Newport; William Jones Williams, M.D.Edin., L.R.C.P.Lond., Port Madoc.

The following were admitted Members on the 22nd :—

William Bartlett Dalby, M.B.Cantab., Ashby-de-la-Zouch; Charles Goate Gurdon, Boxford, Suffolk; Charles Turner Haddelsey, Caistor; John Henry Hunter, Youghal; Edward Moore Little, Melksham, Wilts; Richard Minors, Sudbury, Derbyshire; John M'Kenzie, Inverness; Edward Hepburne Seccombe, Clapham; Frederick Edwin Vernède, Blomfield-street, Bayswater.

It is stated that of the 34 candidates who presented themselves for examination, 8 failed to satisfy the Court as to their proficiency, and were consequently referred to their hospital studies for the period of six months. There will not be another examination for the diploma of membership until the middle of July. In the interval, Professor Hancock will commence his annual course of lectures, and will deliver six on the Anatomy and Surgery of the Foot, in continuation of those delivered last year by this gentleman. The following gentlemen passed their primary examinations in Anatomy and Physiology at a meeting of the Court of Examiners on the 14th inst., and when eligible will be admitted to the pass examination :—

Daniel George Rowlands, William Inglis Mason, Francis Day Atkins, James Cross, and William Butler, of Guy's Hospital; James Williams Danahor, Charles John Jones, Henry Worsley, and Ellis Henry Ellis, of the Dublin School; William Agar Renshaw, Handel Ashworth, and Henry Davies Crighton, of the Manchester School; George Bolton, Thomas Benson, and George Rowell, of the Newcastle School; George Harrison Evans, Richard Nightingale Broughton, and William John Noel Bell, of St. Bartholomew's Hospital; Samuel James Davidson and William Hodgson, of University College; Edmund Williams Yorath, of Charing-cross Hospital; John Rowland Wright, of St. Mary's Hospital; William Edward Baylie, of Middlesex Hospital; Alfred John Henry Crespi, of the Birmingham School; Charles Henry Beardshaw, of the Leeds School.

The followed passed on the 15th inst. :—

Charles M'Cann, Thomas Henry Colman, and Ferdinand Beadles, of Westminster Hospital; Ebenezer Nicholas and Charles Mead, of St. Bartholomew's Hospital; Robert Wilkinson and George Brack Johnson, of the Newcastle School; John Thos. Rodmayne, of Guy's Hospital; George Woodward, of St. George's Hospital; Henry Wotton, of Edinburgh; Matthew Lorenz Bartholomewsz, of Calcutta and Edinburgh.

It is stated that no less than 21 candidates out of the 57 who presented themselves failed to reach the collegiate standard, and were consequently referred to their studies for the period of three months.

ETHNOLOGICAL SOCIETY, LONDON.—The anniversary meeting was held on Tuesday, at the Society's Rooms, 4, St. Martin's-place, Trafalgar-square. The report of the council and treasurer was most favourable as to finances and general progress. General Balfour, in proposing a vote of thanks to the president, (Mr. Crawfurd), paid a well-merited compliment to his zeal and ability, on behalf of Ethnological Science, and especially his devotion of labour to the advancement of this institution in particular, which eulogium met with a warm response from the Fellows present. The Officers and Council elected for the ensuing year are:—President—John Crawfurd, Esq. Vice-Presidents—Robert Dunn, Esq.; Sir John Lubbock, Bt.; Professor Busk; General Balfour. Honorary Treasurer—F. Hindmarsh, Esq. Honorary Secretaries—Thomas Wright, Esq.; D. W. Nash, Esq. Honorary Librarian—L. J. Beale, Esq. Council—Lord Milton; W. Blackmore, Esq.; Henry G. Bohn, Esq.; Dr. A Campbell; T. F. D. Croker, Esq.; Sir W. A. Clavering, Bt.; J. Dickinson, Esq.; Sir Justin Shiel; Rev F. W. Farrar; Dr. Beddoe; Dr. Harrington Suke; Prof. Huxley; Joseph Mayer, Esq.; Sir R. I. Murchison, Bt.; Sir Charles Nicholson, Bt.; Sir Edward Rynn; C. R. des Ruffières, Esq.; Lord Strangford; John Thrupp, Esq.; Sir John Davis, Bt.

PHARMACEUTICAL SOCIETY OF GREAT BRITAIN—CANDIDATES WHO PASSED THE MAJOR EXAMINATION, MAY 22, 1867, AS PHARMACEUTICAL CHEMISTS.—Edmund Hewson Armitage, Louth; Charles Curé, Mauritius; George Thomas Naldrett, Brighton; Edward Owen, Montgomery; Lewis Buttle Ross, Driffield; James Williams, Mildenhall.

PHARMACEUTICAL CONGRESS.—Besides the Medical International Congress of Paris (August 16th) the pharmaceutical branch of the profession are to have a great meeting at Paris, to which pharmaciens at home and abroad are invited. The meetings will be held on the 4th, 5th, and 6th of July next. All questions bearing upon the practice of pharmacy will be freely discussed, and it is expected that the interchange of notions and views will be conducive to the most beneficial improvements as regards theory and practice.

UNIVERSITY OF GLASGOW, DEGREES CONFERRED, MAY 16TH, 1867.—DOCTORS OF MEDICINE.—Otho Francis Wyer, William Galloway, Joseph H. Menzies, M.B.; Thomas Fielding, and William Anderson.

BACHELORS OF MEDICINE.—George A. Turner, Alexander T. Thompson, James M. Wilson, William N. Maccall, Robert Hamilton, George A. Heron, William G. Laidlaw, Archibald E. Malloch, B.A.; Eustace B. Thompson, James M'Ilroy, Gavin P. Tennant, Jonathan A. Harrison, John Ewan Brodie, Duncan Crichton, James Finlayson, William Henderson, Kenneth F. M'Lennen, Donald Black, John M'Lauchlan, Thomas W. Jackson, Donald Fraser, Donald Campbell, Joseph Coats, William M'Laurin, John Chalmers, Frank L. Stephenson, and Henry Appleton.

MASTERS IN SURGERY.—William Henderson, George A. Turner, James M. Wilson, Alex. T. Thompson, William N. Maccall, George A. Heron, Robert Hamilton, John M'Lauchlan, Eustace B. Thompson, Jonathan A. Harrison, John Ewan Brodie, William M'Laurin, Alex. Cameron, M.D.; Frank L. Stephenson, Henry Appleton, and William Anderson.

The following gentlemen were named as entitled to Honours, to Special Commendation, and to Commendation, on account of distinguished merit at the various Examinations for the Degrees, viz.:—

I. HONOURS.—Joseph Coats, M.B.; and James Finlayson M.B.

II. SPECIAL COMMENDATION.—Gavin P. Tennant, M.B.; and Archibald E. Malloch, B.A., M.B.

III. COMMENDATON.—Henry Appleton, M.B., C.M.; John Chalmers, M.B.; and William G. Laidlaw, M.B.

County and City of Cork Medico-Chirurgical Society.—At the last meeting of the Session, Wednesday evening, 8th May, the following officers were elected by ballot for the ensuing year:—President—Dr Johnston. Vice-President—Dr. N. J. Hobart. Secretary—Dr. Purcell. Treasurer—Dr. Curtis. Council—Dr. Popham; Dr. Finn; Dr. O'Connor. Do. three late Presidents—Dr. Cummins; Dr. Cremin; Dr. E. R. Townsend, Jun.

The Endoscope.—Professor Andrews, of Chicago, has employed the magnesium light with great advantage in the use of the endoscope for examining the urethra.—*Boston Journal*, April 11.

The Medical Teachers' Association.—At a meeting held on the 27th ult. the following resolutions were passed:—

"That the Association should consist of the staffs of the metropolitan hospitals and teachers in the hospital schools recognised by the examining boards.

"That the primary object of the Association should be to confer on all subjects connected with the education of medical students in the schools of London, and to be a medium of communication between the teachers.

"That the name of the Association should be The Medical Teachers' Association.

"That there should be a council of the Association, consisting of the president, with one member from each school, a treasurer, and a secretary.

"That the Association should meet at least four times in the year, one of such meetings being the annual meeting.

"That on the requisition of not less than ten members to the President, the Council should call a general meeting of the Association."

Mr. Brodhurst was elected secretary.

Return of the number of promotions from the rank of Assistant-Surgeon to that of Surgeon, from the 1st day of January, 1857, to the 1st day of January, 1867, distinguishing each year separately:—1st January to 31st December, 1857, 40; 1858, 40; 1859, 12; 1860, 12; 1861, 4; 1862, 21; 1863, 16; 1864, 25; 1865, 29; 1866, 25.—Total for 10 years, 224: average promotions per annum, 22, or 31 years' service, *in all climates*, previous to promotion!!!—T. G. Logan, Director-General. An Assistant-Surgeon enters the service at the average age of twenty-four years, he serves, according to the above return previous to promotion, thirty-one years, making him on promotion fifty-five years, at which age he is *compulsorily* placed on the retired list on half-pay of his rank, viz.—10s. a-day.

Royal Zoological Society of Ireland.—The opening of the new monkey house, and the addition of several animals to the Society's collection, have attracted a large number of the public during the last week. More than five thousand persons visited the Gardens from the 16th to the 23rd instant, and as a very handsome pair of Condors, presented to the Society by S. R. Graves, Esq., M.P. for Liverpool, have safely arrived, an increased attendance is anticipated. These birds are the largest of the tribe of vultures, the wings usually covering a space of nine feet from tip to tip. Their powers of flight are extraordinary, and as they build their nests in the peaks of the Andes, often 15,000 feet from the level of the sea, they are seen at heights to which no human being ever reached. The Condor lives principally on carrion, but besides this mode of subsistence it will attack young goats, and a pair combining together will kill Llamas, and even the Puma, an American species of tiger.

NOTICES TO CORRESPONDENTS.

Dr. Martin Portlaw.—We regret we cannot insert your letter, having declined a communication advocating the claims of another candidate. It is said that the gentleman is not a member of the Association.

Mr. Galloway.—The abstract is received with thanks, and shall be made use of on the earliest opportunity.

Dr. Abraham K.—Synonymous with A.D.

To Dr. E.—We believe Messrs. Wells, Close, and Co., of Cannon-street, are the manufacturers.

A Subscriber wants to know what is "Loxa Bark."—"Loxa Bark is the old term for crown bark of commerce. Variety *Condaminea Vera*. It is found on the declivities of the mountains of Quito, in the province of Loxa (between 3°42′ and 4°40′ south latitude) and thus called "Loxa Bark."

Hy. E. Browne.—Dr. Chapman's address will be found in the "Medical Directory."

Dr. Evanson is thanked.

X. F.—You will find it in our columns of April 3.

A Medical Student.—Sir William Fergusson has accepted the office of President to the United Hospital Athletic Club.

A Subscriber who forwards certain corrections in our Summary of Science should bear in mind that our readers are not all proof-readers or schoolmasters, and are, we hope, content to receive information conveyed in intelligible English, without puzzling their brains in the search of printers' errors or faults of style, which, perhaps, are after all, no faults at all.

TO THE EDITOR OF THE MEDICAL PRESS AND CIRCULAR.

Sir,—You will be good enough to inform me what are the legal proceedings to be taken in order to stop some notorious quacks, who have taken up their residence in this part of the country. Or is there any corporation organized for the suppression of such "doctors," whose deputy it is the business of.—I am sir, very respectfully yours,

Amicus Rei.

[We can hardly advise our correspondent to resort to the legal remedy provided by Section 40 of the Medical Act, for, owing to the frequent failure of justice, that resource has been almost abandoned. If the quack uses any title or letter, signifying that he is a member of a qualifying corporation, or that he is registered, he could then be punished, but generally assumed titles meaning nothing, such as F.R.A.S., or Member of the Royal College of Physicians and Surgeons, are adopted. —Ed. M. P. & C.]

TO THE EDITOR OF THE MEDICAL PRESS AND CIRCULAR.

Sir,—Suppose a qualified and registered Practitioner meet a quack in consultation, would the respective licensing bodies or the "Medical Council" take notice of such disreputable conduct. Inquisitor.

[The Licensing Bodies probably, and the Medical Council certainly, would think the correction of such a practice, disreputable though it be, hardly within their province. The Council of the Royal College of Surgeons of Ireland, however, did so a few years since, and passed a resolution condemnatory of the practice, which had great effect in putting a stop to it in Dublin.—Ed. M. P. & C.]

MEDICAL DIARY OF THE WEEK.

Thursday, May 30.

Royal Institution—3 p.m., Prof. Huxley, "On Ethnology."

Friday, May 31.

Royal Institution—8 p.m., J. Sterry Hunt, Esq., "On Chemistry of the Primæval World."

Saturday, June 1.

Royal Institution—3 p.m., Prof. Huxley, "On Ethnology."

MEDICAL VACANCIES.

Birmingham Lying-in Hospital—Resident Surgeon.

Clinical Hospital and Dispensary for Children, Manchester—House-Surgeon.

Hereford General Infirmary—Dispenser.

Hospital for Diseases of the Chest, Victoria-park—Junior Assistant-Physician.

Jamaica Lunatic Asylum—Assistant Medical Officer.

Nottingham County Lunatic Asylum—Assistant Medical Officer.

Parish of Paddington—Medical Officer of Health.

MEDICAL APPOINTMENTS.

O'Reardon.—Daniel O'Connell O'Reardon, F.R.C.S.I., L.K. and Q.C.P.I., &c., has been appointed Medical Officer and Public Vaccinator to Kiltormer Dispensary District, Ballinasloe Union, vice Dr. Ireland, resigned.

Tyrrell.—Henry J. Tyrrell, Esq., F.R.C.S.I., M.R.I.A., has been appointed Surgeon to the Mater Misericordiæ Hospital in place of the late Professor Ellis.

Births, Marriages, and Deaths.

Announcements are inserted without charge, and must in all cases be authenticated with the signature of the sender.

BIRTHS.

Cuthbert.—On the 27th ult., at Waterside, Derry, the wife of Alexander Cuthbert, Esq., M.D., of a daughter.

Butler.—On Saturday, the 25th inst., at 186 Commercial-road, Newport, Monaghan, the wife of John Butler, Esq., L.R.C.S.I., & L.R.C.P.E., of a daughter.

MARRIAGES.

M'William—Kirkpatrick.—On the 1st inst., at Ballyclare Presbyterian Church, by the Rev. Henry Cooke, D.D., LL.D., assisted by the Rev. E. Legate, William A. M'William, M.D., L.R.C.S.E., Belfast, to Mary Jane, only daughter of John Kirkpatrick, Esq., Henryfield, Ballyclare. No cards.

Keele—Lee.—On the 14th inst., at Trinity Church, Regent's-park, C. F. Keele, M.R.C.S.E., King-street, Convent-garden, to Emma, eldest daughter of the late W. Lee, Esq., of Plymouth.

Shorland—Bluett.—On the 16th inst., at Applepen, Devon, E. Shorland, M.R.C.S., of Melksham, Wilts, to Caroline, third daughter of P. F. Bluett, Esq., of South Wembury Manor, late of Holcombe Court, Devon. No cards.

DEATHS.

Cowie.—On the 15th inst., at Groveside Cottage, Airdrie, N.B., G. Cowie, M.D., aged 27.

Dix.—On the 10th inst., at Smallburgh, Norfolk (where he had been in practice for upwards of fifty years), John Dix, surgeon, aged 75.

Humpage.—On the 16th inst., at Malvern, J. Humpage, M.R.C.S.E., of Clifton, aged 51.

Llewelyn.—On the 15th inst., at Tunbridge Wells, J. H. Llewelyn, surgeon, 8th Hussars, aged 44.

Powell.—On the 18th inst., at Brighton, H. Powell, M.D., Oxon, aged 58.

MEDICAL SOCIETY
OF THE
COLLEGE OF PHYSICIANS OF IRELAND.

The President, Professor STOKES, in the Chair.

Continuation of the Papers read before the Meeting, on 22nd May, 1867.

(Continued from page 511.)

DR. HAVERTY, Surgeon, 52nd Light Infantry, read the following

ABSTRACT OF CASES OF CEREBRO-SPINAL MENINGITIS, AND SO CALLED BLACK TYPHUS, OR MALIGNANT PURPURA, ETC.; FROM THE HOSPITAL RECORDS OF THE 52ND LIGHT INFANTRY.

Private Hornblow—Meningitis.—On the 24th of February he was on guard at the Magazine Fort, and on being relieved next morning came to hospital with all the signs of an impending severe attack of disease. There was a tendency to prostration, with a livid purple hue of countenance, suggesting at first sight the probability of an acute affection of the lungs; but there was no cough, and no stethoscopic indication to that effect.

After lying quietly in bed for some hours, sleeping a good deal, he suddenly complained of severe pain of head, which gradually increased to such an extent that about midnight he became very restless, and when visited about four o'clock A.M., was tossing about and almost shouting with pain. The pulse at this time was firm and resisting, and between 70 and 80 beats; tongue dry and brown; skin hot and harsh; nothing peculiar in the pupils.

A few leeches to the temples; calomel and James's powder every second hour, and a turpentine enema. were followed by well-marked relief.; but again in the following night, there was a recurrence of the violent head-symptoms, and on being seen at one o'clock A.M., his state was much as on the previous night. A blister was applied to the nape, the head shaved, and the tartarate of antimony ointment rubbed into the scalp.

A state of comparative quiet again succeeded for many hours, but only to be followed by the usual intense pain of head, with constant moaning and restlessness, and no steady sleep; the tongue remained dry and brown; the pulse less resisting; the pupils sluggish, but not irregular; bowels open.

On the 1st of March there was little change, except that he now for the first time complained of severe pain all along the spine, with great tenderness on pressure.

The pain of head and in the eye-balls still persistent, but not so intense as at first; tongue getting a little moist, but covered with brown fur; pupils sluggish; intestinal discharges very dark and offensive.

On the 3rd the pain of head was more troublesome than in the back; the pupils showed little or no sensibility to light, and double vision was observed. No urgent thirst was present from the beginning, and a fair amount of nourishment was taken.

Next evening there was vomiting of dark bilious matter, the irritability of stomach, hiccup, and cold sweating about the trunk lasting for some hours. The man's general conditions seemed much improved next morning, but it did not continue many hours. The usual moaning, restlessness, and sleeplessness succeeded, and he now began to refuse wine or nourishment. The bladder became inactive, the urine having to be drawn off several times in the twenty-four hours.

In the succeeding days the pain of head and back subsided to a marked degree, but the general conditions became more and more unfavourable. The tongue was again dry and glazed, pulse increased in frequency and weakness, and the thirst urgent. The wandering, which had been only occasional, was now perpetual. There was intense restlessness and laboured respiration, and death ensued on the evening of 11th March—15 days after admission to hospital.

The treatment had consisted chiefly of the various counter-irritants already alluded to, and mercury pushed to the extent of ptyalism.

On examination of the body, there was found intense congestion of the membranes of the brain, with opaque patches of the arachnoid; the brain substance comparatively healthy. The congestion was much more intense at the base, accompanied with copious deposition of lymph, and traces of purulent matter about the pons and upper portion of the medulla oblongata. The ventricles contained a considerable amount of muddy fluid. Beneath the calovarium, near the anterior end of the longitudinal sinus; there was a patch of lymphy deposit on the dura mater.

The contents of the thorax and abdomen were comparatively healthy.

Private Matthews—Meningitis.—Admitted the 16th of April with severe rigor, and the general conditions antecedent to ordinary continued fever; remaining closely covered up with the bed clothes during the day, but showing no signs of incoherency, or any remarkable or alarming symptoms until about 2 o'clock next morning, just after being at stool. At the time of going to stool he spoke in a natural manner to the orderly of the ward and for some minutes after returning to bed. Then suddenly he complained of intense pain of head, and almost immediately became insensible.

On being visited soon after by Assistant-Surgeon Gogarty, he was found insensible, as above described—the respiration laboured and very rapid, skin cold, pulse rapid and weak, pupils natural and sensible to light; no loss of sensation in the limbs, as evidenced by pinching. The stethoscope indicated very loud and clear respiratory murmur all over chest, masking the heart sounds, which were very feeble; his jaws were firmly locked, and there was incessant tossing about of arms and legs. His head was immediately shaved, cupping ordered over the nape, calomel by the mouth, and a turpentine enema.

Two hours later, when visited by myself and Dr Gogarty, all the symptoms had become much aggravated, the convulsive action was accompanied with opisthotonos, lasting for a few seconds at a time; the surface of body was quite cold, pulse weak and rapid, and barely perceptible, breathing stertorous, pupils now dilated. About the lower third of the thighs a few petechiæ were observed.

Various stimulants and counter-irritants were ineffectually tried—ammonia to the nostrils, sinapism to various parts of the body, &c.

The convulsive action ceased shortly after, except that the jaws remained locked, and death ensued in a state of comparative repose at 8.30 A.M., 23 hours after admission to hospital.

Autopsia horis xxvi., post-mortem.—Body remarkably muscular and robust, cadvaric rigidity well marked, intense lividity (which began to appear directly after he had expired) about the head, face, and trunk; large vibices about the thighs.

On removing the calvarium, the dura mater was found adherent to a great extent in the course of the longitudinal sinus, and here and there a few pointed cheese-like eminences were seen on the surface of that membrane.

All the sinuses were distended with fluid blood, but the membranous congestion was not very remarkable, except at base of brain, where shreds of lymph were found about the pons and upper part of medulla oblongata.

In the chest no remarkable engorgement of lungs was observed, but all the great vessels were distended with fluid blood. An unusual amount of fluid was contained in the pericardium; the heart itself was large, and the right chambers distended with *post-mortem* fibrinous clots; the valves healthy.

In the abdomen the liver was found enormously enlarged, and weighed nearly six pounds; both kidneys

were enlarged and engorged, especially the left; bladder distended with fluid.

Intestines healthy.

Private Lester—Purpura maligna.—Admitted last evening, 30th April, about eight o'clock P.M., making little or no complaint, except of some pain in one leg, which afterwards extended to both limbs.

He had come off guard in the morning, and was observed to be in his usual high spirits; preparing his kit for next day's regimental inspection, &c. In the course of the day he was said to have had a rigor, but he had nothing of the kind on coming to hospital, and mentioned nothing of its having occurred.

At a late hour of the evening he was cheerful, talking to the men in the ward, and slept soundly until towards morning, when he began to ramble in his sleep, and soon after woke up complaining of severe pain in the limbs and body, but not in his head.

About seven o'clock in the morning he passed a stool under him, not unknowingly, but stated that he could not control himself. A short time previously he vomited some white frothy matter, small in quantity.

Large livid purpuric spots were now seen about the lower limbs, and signs of general prostration came on; the conjunctivæ were deeply congested, the ends of the fingers and finger-nails were livid and numb; the surface of the body, though not cold, was not warm; the tongue was thickly loaded with bright yellow deposit; the pulse was scarcely perceptible, but the heart's action, examined by the stethoscope, was not correspondingly weak; there was no approach to convulsive action as in the last case. The man replied satisfactorily to questions, though rather incoherent when left to himself. There was no pain of head throughout the case, but there was now some pain in the back of his neck, which did not extend down the spine. The prostration steadily gained ground in spite of copious stimulants and counter-irritants, and death ensued at 12.30 P.M., sixteen hours after admission to hospital.

Post-mortem twenty-three hours after death.—Externally.—Body stout and well formed, purpuric patches all over the body, more particularly over the thighs and legs.

Head.—Dura mater healthy; a slight increase in thickness and tenacity observable in arachnoid and pia mater; an unusual quantity of serous fluid at the base of the brain and in the spinal canal, the fluid flowing from the latter being of a much darker colour from an apparent admixture of blood. The substance of brain and of spinal chord healthy and free from congestion.

Chest.—Heart healthy; stained with mulberry coloured spots over its suface, and left side full of dark coloured fluid blood; one or two small dark coloured cogula in the chambers.

Lungs.—Healthy, congested.

Abdomen.—The liver pale in colour but healthy; spleen healthy; kidneys rather large, healthy; intestines healthy; bladder empty.

Private Thomas Cover—Purpura Maligna.—A healthy lad aged 19, less than two years enlisted, was observed to have a shivering fit on the morning of 6th May, and was sent to hospital by the sergeant of his company; the shivering fit ceased soon after he got to bed, slight headache and pain in the limbs were felt during the day, but nothing serious was observed in the case until about 6·30 P.M., when the countenance assumed a dusky pale ashen hue, and signs of prostration and drowsiness showed themselves, though not nearly to so intense a degree as in the late fatal cases. The eyes were free from congestion, the pulse slow and feeble, but the heart's action tolerably good, the limbs dry and tending to coldness, but no numbness or lividity of fingers. There was great unwillingness to reply to questions, but no incoherency; little or no pain of head or limbs, and no trace of convulsive action; the pupils natural.

A few livid patches now appeared on the thighs and legs larger than petechiæ, but not so large as those of purpura. An involuntary alvine evacuation occurred about this time, a purgative enema having been given an hour or two before; vomiting occurred two or three times but was not obstinate. A cup of strong tea and afterwards port wine negus were given, sinapisms were applied over the heart, and to the limbs, and friction was used.

The stomach again rejected its contents, and after a short interval brandy and milk was given very frequently in small quantities. It was retained, and a steady reaction and improvement slowly followed. Next day well-marked reaction had become established, the pulse which had hardly numbered 70 rose to over 100, there was a good deal of general febrile action, with occasional restlessness, but no very severe pain of head; faint twitching about the angle of the mouth was observed, the tongue was slightly lateralised on protrusion, and loaded with moist whitish fur; pain was felt about the body and lower limbs, but none in the course of the spinal column; bowels not opened since yesterday; urine scanty and high coloured, and some irritability of bladder.

At midnight, on the 8th, there was great restlessness and moaning; he lay constantly on the left side with the head thrown back, and the spinal column curved to a marked degree, the face was flushed, surface of body hot and dry, and the pulse 120, double vision was also observed about this time.

His condition remained much the same during the next two or three days, but on the 11th a well-marked amendment was observed. He had several hours quiet sleep in the morning, the pulse which had been as high as 140 fell to a little over 100, the tongue was less loaded, the arched position of body much less remarkable, and the expression of eye and countenance more natural.

He continued to improve almost uninterruptedly until the 16th, when he complained of severe pain at the vertex, the left pupil was more dilated than the right, but there had been no rigor, and no marked general febrile disturbance. On the 18th there was a severe rigor about eleven o'clock A.M., following unusually severe pain of head earlier in the morning; towards evening his usual comparatively calm and comfortable condition returned, but each morning since then he has been seized with severe pain, sometimes commencing in the head, and afterwards extending to the loins and thighs, and sometimes *vice versa*. This morning, 22nd May, a prolonged shivering fit of about two hours duration occurred, ceasing about mid-day.

In the treatment of this last case, after the commencement of the reactionary fever, the adminstration of chlorine constituted, for a considerable time, the principal element: its employment was suggested by my friend Dr. Sinclair, who warmly advocates the views of Dr. Watson, relative to its highly valuable antiseptic properties.

REPORT OF FIVE CASES.

By Henry Gray Croly, F.R.C.S.I.

Case 1.—A young gentleman, aged 16 years, previously healthy, ate heartily on Saturday, 17th March, 1866, went to Castle-yard to hear the band play, and was in high spirits; went to a dancing academy on same day, and danced every dance; passed the evening out, and drank some beer, but ate no supper.

Sunday morning, March 18th.—Looked pale, and refused breakfast; said he would not go to church, but would go to meet some friends at St. Patrick's, at three o'clock, by appointment; did not go, however; had shivering fits; went up to bed, and ate no dinner; complained at night of headache, and talked incoherently occasionally; said his throat felt sore; his stomach became irritable, which was soon followed by vomiting; conjunctivæ slightly injected; drank some tea, but vomited it almost immediately. His pulse became quick, and there was a heavy smell from him (which he noticed himself). On examining his throat it was observed to be slightly reddened. A few spots resembling purpura were remarked

on his arms, and similar spots were found to exist on the abdomen and thighs. He had no bleeding from the bowels, gums, or nose; he drank some claret; said it hurt him to swallow; throat brushed with sol. of nit. of silver.

At 12 o'clock the black spots became *broad patches*. I at once sought the advice of Professor Benson, who came with me, and advised a continuance of the claret.

I remained with the patient all night. He was restless, and raved a great deal, but slept some; drank a bottle of claret.

At eight o'clock A.M. said he felt better; drank some tea; his pulse became very rapid; temperature of body high; black spots appeared on his nose and face, and looked as if a quantity of black ink was spilled over his face; he passed no water during the night, but his bladder was not distended.

Catheter introduced. About 4oz. of natural urine drawn off. He complained now of pain in his left wrist. His pulse rose rapidly to 160; temperature of body continued high. He became suddenly insensible, and died at five o'clock (duration of illness about 30 hours).

Black spots became larger, and before death were continuous on his arms, like gangrene.

Treatment—Brandy, beef-tea, and quinine injections; brandy, turpentine, and tr. iron by mouth.

Case 2.—J. D., a fine healthy young man, aged 22 years, residing near James's-street Harbour, by occupation a labourer; was in excellent health, ate his breakfast heartily, and went to work as usual on Saturday, July 14, 1866. At one o'clock he returned home and complained of severe headache and pain in his back; asked for a hot drink, lay in bed, and slumbered till six o'clock; took a dose of Epsom salts by the advice of a woman in the house; he vomited the medicine, and had a slight attack in his bowels; had his feet bathed, passed a most restless night, took a little punch. At seven o'clock on Sunday morning (15th inst.), black purplish spots appeared on his nose and face—similar spots appeared on his arms; at half-past eleven o'clock he died. A medical gentleman, living in the neighbourhood, was called in on Sunday morning, but the man died ere he reached the house. (Duration of illness 22½ hours.)

Case 3.—A. B., aged 19 years, a student in medicine, on Monday, April 1, took rather violent exercise. That evening he felt tired and went to bed early, but was all right the next morning. On Wednesday, 3rd inst., he was in very good health, and ate his meals very heartily. At night he complained of some soreness in his throat, but it was all gone the next morning. On Thursday, 4th inst., he got up to his breakfast and ate it as usual; none of the family saw him that morning until he returned from hospital. While at hospital he said that he had got an attack of influenza, and was altogether knocked up; he did not go up into the wards, but sat at the fire in the resident's room until after the morning visit. He got a dose of James's powder at hospital, which he brought home with him. He told several of his friends that he felt an *all-overness*. His uncle noticed a red spot in the corner of his right eye. He went to bed at two o'clock, and took some gruel, but vomited immediately after. At seven o'clock he took the James's powder. This put him into a great perspiration. He was very thirsty during the night, and drank some lemonade and water; he vomited frequently in the morning; he said he spent a very long, tiresome night, and slept very little. At about eleven o'clock last night he himself noticed some darkness on the upper lid of his right eye, and made the remark that he hoped his eye would not be injured. Friday, this morning he felt pretty well while lying down, but his head *pained* if he attempted to sit up. He took some tea, but threw it up immediately after. The lid of his eye had become much darker in colour.

Friday, April 5, eleven o'clock A.M., I saw him for the first time; he was supposed to be asleep; lying on his right side; respiration rapid; pulse rapid and feeble; coldness of hand; reddish mottling on face; ecchymosed appearance of eyelid; on stripping patient I observed dark spots of irregular shape, some small, like ordinary purpura, and others large and of more violet hue; pupils small. I tried to get him to speak to me, but could not succeed; he soon became restless and moaned; his friends could not at first believe he was insensible, as he spoke to his aunt a few minutes before my arrival, and asked her to sit down; bladder not distended; bowels have been moved during night; he slept none; abdomen soft; vomited frequently before I saw him. I at once pronounced the case one of these called Black Death, or "Malignant Purpura" (which I consider a better name), and informed his friends of the extreme gravity of the case, and the certainty, so far as I believed, of its fatal termination.

I applied hot jars to the feet, administered brandy and ether by the mouth, but patient could only succeed in swallowing a small quantity.

I injected brandy, ether, carb. of amm. and beef-tea in small quantities and at short intervals.

He soon worked violently in convulsions, and would have fallen out of bed but for being held; upper extremities chiefly affected about half-past twelve o'clock, and head tossed about; left conjunctiva much congested; eyes half open; spots on legs and thighs larger and more irregular. He appeared to suffer much from spinal irritation, though at no time was the head actually thrown backwards. He sank rapidly, and died at half-past two o'clock. (Duration of illness 30 hours.)

The case was seen by Dr. Geoghegan about twelve o'clock, by Dr. Stokes about one, and by Dr. Benson at half-past one.

At Dr. Stokes' suggestion I added ten grs. of musk to *each* injection, and five drops of laudanum.

Case 4.—Anne Gill, 4 Hanbury-lane, aged 2 years, died Friday, April 26th, of ten hours' illness.

History.—Her father states the child was in good health until four o'clock on Thursday evening, the 25th instant, when she was attacked with vomiting and purging, convulsions set in about an hour and a-half before death, spots appeared (the left hand and *arm only* were convulsed)

Purplish spots appeared on her face, and some on her arms, and all over the body; the spots increased in size and number after death; none of the people in attendance ever witnessed anything like the disease, but the father took it to have been the measles.

Case 5.—Marianne Byrne, aged 21 years, always healthy and strong, resided in 48 James's-street, was attacked on Tuesday night (at half-past eight o'clock), 13th May, with severe rigors, and coldness of the surface of her body; she vomited repeatedly a slimy yellow matter, the vomiting continued until four o'clock in the morning. She had one motion from the bowels during the night.

Diarrhœa then set in, and the bowels moved at least ten times. All day, Wednesday 14th inst., she suffered from severe headache and pain in her back; blue spots, which soon became black, appeared on Wednesday on her legs; surface became colder; she died in *convulsions* with the head *forcibly thrown back at twelve o'clock on Wednesday night.* (Duration of illness 28 hours.)

Shortly before death black spots appeared on her arms. There were some on her face also.

REPORT OF THREE CASES WHICH OCCURRED IN MEATH HOSPITAL, UNDER THE CARE OF DRS. STOKES AND HUDSON.

Case 1.—Commencing with the ordinary symptoms of a pyrexial attack, these followed on the second day by unusual prostration, the occurrence of head symptoms, and the appearance of a peculiar eruption on the extremities.

Much muttering, delirium, stupor, and sleeplessness; gradual sinking; death on the morning of the seventh day.

Post-mortem—Cerebral arachnitis; no apparent lesion of the spinal cord.

Mary Lewis, æt. 23, a servant, living in South King Street, had been in bad health for some months past This attributable to hard work and indifferent food. Catamenia regular.

On Wednesday, January 30, 1867, she took ill, the first symptoms being a severe pain in the *right* leg. This was soon followed by headache and rigors. The same evening she had an attack of *epistaxis*. Next day there appeared on the legs and arms numerous spots somewhat resembling those of purpura hæmorrhagica.

She was admitted Friday evening, February 1.

Saturday Feb. 2 (fourth day of her illness).—When seen she had the appearance of just wakening from a heavy drunken slumber. The face was dusky, stupid-looking, the eyes suffused and dull. The skin generally resembled that of a patient in typhus fever. She complained of great headache, principally in frontal region. Required to be roused before she answered questions; general hyperæsthesia; much muttering; delirium at times; partial retraction of the head.

Over the chest the percussion and auscultatory sounds were perfectly normal. The heart's action was occasionally irregular and very weak; there was not any murmur.

The tongue was brown, but moist; there was considerable thirst, no vomiting, appetite bad, but she took nourishment well. Bowels rather confined.

Eruption.—On the legs and arms were found spots of a dark purple colour, and of different sizes; all of them accurately defined and circumscribed, also slightly elevated; perfectly indelible on pressure, and in places covered with tiny papillæ, or even vesicles. The largest of these spots was about the size of a sixpence. They were confined to the extremities, with the exception of one or two small ones on the face, and many over the glutœal region.

Besides these spots there was noticed on the chest a mottling of the skin, almost passing into the form of petechiæ in places; besides a dusky hue like that of typhus.

On this morning the pulse was 84, full; the respiration 28; and the temperature 99°·6.

The treatment pursued was as follows:—

Wine, ℥xij., oranges, chicken-broth.

℞ Potassæ chlorat. gr. 60.
Sodæ bicarb. gr. 60.
Decoct. cinchon. ℥vj.
℥j. cum succ. limonis ter die sumend.

Sunday, 5th day.—In much the same state—restlessness and delirium. Menstrual flow set in at night, about the regular time.

Monday, 6th day.—Pulse, 96; respiration, 63; temperature not taken. Eruption more raised, and vesicular appearance better marked; less hyperæsthesia; hardly conscious; continue treatment.

Evening.—Pulse, 116; respiration, 48; temperature, 102°·9. Sleeping, but very delirious. From this time she sank rapidly, and died calmly at 7 A.M. next morning.

Autopsy—Four and a-half hours after death.—Spots unchanged in appearance. Over one spot on the *right* leg a large vesicle had formed, containing a considerable quantity of serous fluid. It will be remembered that it was in this, the *right* leg, that the pain first set in at the beginning of the patient's illness. The cuticle was not stained by the extravasation, as it was found normal in colour on raising it from off one of the spots. On the chest some brownish petechiæ were visible. The head was less retracted than during life, and there was no rigidity of the muscles of the neck.

On removing the brain, the arachnoid covering Willis' circle was found thickened and inflamed. In the sub-arachnoid spaces, and along the course of the chief vessels, small depositions of lymph were noticed. The pia mater was much congested.

The spinal cord throughout was healthy, nor was there any lesion of its membranes.

The thorax and abdomen were not examined.

Case 2.—Setting in with pyrexial symptoms; almost immediate prostration; delirium; hyperæsthesia; stupor; death 64 hours from first seizure.

Mary Jane Commerford, æt. 13, daughter to a nurse in the hospital; always enjoyed moderately good health; had not menstruated

Took ill at 7 A.M., Wednesday, April 17th, 1867, the symptoms being shivering, headache, pains, great thirst, nausea, and frequent vomiting of a dark green substance. These were soon followed by great depression. During the day she became very restless, spoke but little, and towards evening began to wander.

Early next morning she was found delirious, and very restless, with great congestion about the face. Leeching at the mastoid process relieved her. At 9 30 A.M. she was almost unconscious, answering no question, nor taking any notice when spoken to.

The face was much congested; the eyes like those of typhus, except that the pupils were dilated; there was no noticeable strabismus; the skin was dusky; on the face were one or two small spots, many on legs and arms.

These spots were small, smooth, and *not* raised—though afterwards some became slightly elevated towards their centres.

There was no vesicular appearance, as in Case 1. Each spot had a well-defined margin; they were indelible on pressure.

When touched, she moved restlessly, but made no complaint of pain.

No physical signs were detected on examination of the chest and abdomen. The heart was very weak. There was constant vomiting of a greenish fluid, transparent, but semi-viscid. The tongue was covered with a creamy white fur. She had eaten nothing since the first attack.

Pulse, 124; resp., 44; temp., 98°·2 only.

In the evening in the same state; spots rather larger. Has had two injections of beef-tea, with quinine; also, small doses of chlorate of potash in porter, by the mouth—but this, after a short time, she refused.

Friday, third day.—More conscious this morning; can be roused by loud speaking; slept very indifferently; vomiting still continues; motions from the bowels somewhat greenish; passes water well—it is light-coloured, and on inspection seems free from anything abnormal.

Pulse, 104; resp., 24; temp., 96°·7.

Evening.—Vomiting ceased; takes some notice if roused; not so restless; if left alone falls into a heavy sleep, with loud stertorous breathing.

Pulse, 80; resp., 24; temp., 98°·6.

At 10 P.M. she rose from bed, walked about the ward, and spoke to her mother. After a short time her mind began to wander. She fancied she saw some one sitting at the fire beside her mother (who was alone). Heavy stertorous breathing came on, and without rallying she died at 11 P.M., after 64 hours' illness.

No post-mortem examination.

Case 3.—Beginning with head symptoms; illness attributed to fright. Much stupor. Pustular eruption on legs, red spots on arms. State improved by stimulants. Range of temperature resembling that of typhus. At present (Saturday May 11, 18th day) almost convalescent.

Mary Maguire, æt. 26, a nurse in Mercer's Hospital (only eleven weeks in this situation), ill since Wednesday, April 24, 1867, on which day she was much frightened by a patient who was brought in in "delirium tremens." Her head became immediately affected. She had rigors and green vomiting. Soon afterwards she fell into a drowsy state, neither speaking nor answering when spoken to. On Saturday night a rash appeared on the legs. The trunk was almost free from this. She was admitted Sunday evening, April 28.

Monday, 6th day.—In a drowsy stupid state, eyes closed; slight converging strabismus; pupils dilated. No retraction of the head; slight hyperæsthesia. No nausea; no vomiting; bowels confined; tongue (protruded towards the right side) covered with a dirty

creamy fur. Passes water at times involuntarily. Heart sounds weak, but regular; no chest signs.

Eruption.—Round the mouth was noticed a complete ring of herpetic vesicles. On the chest two small pustules were seen. On the legs were many of these—some of them just commencing to form, others withering and dried up. Each was surrounded by an inflammatory areola. They closely resembled the rash of varioloida. On the arms, especially near the elbows, there were seen large reddish spots, slightly elevated, and with sharply defined margins, the counterparts of the spots in case 1, except in colour, and in their being delible on pressure.

Treatment.—Abundance of nourishment, stimulants in moderation, and full doses of chlorate of potash.

Tuesday, 7th day.—Pulse, 104; respiration, 30; temperature, 100°·3. More conscious; spots on legs fully out, also well-marked on arms.

Wednesday, 8th day.—Pulse, 104; respiration, 28; temperature, 100°·2.

Thursday, 9th day.—Pulse, 112; temperature, 100°·8

Friday, 10th day.—Pulse, 112; respiration, 28; temperature, 100°·3. Much better; spots fading; quite conscious.

Saturday, 11th day.—Pulse, 120; respiration, 24; temperature, 101°·7. Spots nearly gone; no pustules on legs visible; sleeps well.

Sunday, 12th day.—Pulse, 120; respiration, 24; temperature, 98°·2.

Monday, 13th day.—Pulse, 104; respiration, 24; temperature, 98°·3.

Tuesday, 14th day.—Pulse, 120; respiration, 26; temperature, 102°·4.

Wednesday, 15th day.—Pulse, 128; respiration, 30; temperature, 102°·9. Not so well; rigors; skin much mottled; pupils greatly dilated. The shiverings passed off in an hour or so, and she became much better.

Thursday, 16th day.—Pulse, 96; respiration, 22; temperature, 97°·9.

Friday, 17th day.—Pulse, 106; respiration, 24; temperature, 98°·9.

Saturday, 18th day.—Pulse, 108; respiration, 24; temperature, 98°·0.

Ordered wine, ℥x.

P.S.—This patient shortly afterwards left hospital quite convalescent.

The following case has great interest in connection with the complication with measles, which disease supervened in the course of the purpuric fever, and seemed to suspend it. It is given in the words of the mother of the child:—

On Friday, the 8th of last March, my little daughter Mabel, aged 6½ years, was suddenly seized with headache, shivering, and pains in the side and shoulder. She had always been a remarkably healthy child, never having had any illness, but I had observed, for some months, that she had been looking ill and pale, particularly so for a few days before her illness, and her skin had a dark shade through it, as if dirty. On this day she seemed to be quite well; spent two hours at her lessons, and ate her dinner at two o'clock with a good appetite. It was about four o'clock in the afternoon when she complained. She was put to bed, and given warm drink, and as her little brother had measles at the time, we thought she was taking them. During the night her stomach was sick six times, and each time seemed to weaken her; she also wandered a little in her sleep.

9th.—On Saturday morning, when her father saw her, he observed spots of purpura about her eyes, forehead, and chin; a leaden-coloured appearance of the entire face, particularly dark and sunken round the eyes, with an appearance of blood under the membrane at the angles of the mouth, of a lighter shade than the other spots. The dark purple spots were scattered over the back, thighs, legs, and feet; those on the lower extremities were larger and more irregular than those on the face—some of them like drops or splashes of ink—while those on the face were more like grains of shot. Her father at once ordered her as much hot sherry and water as she could take, and mustard over the stomach, to stop the sickness, which, with headache, continued. Dr. MacDowel saw her at eleven o'clock, and prescribed stimulants and mustard-plaister to the stomach. She now complained of pain in the back of her neck, in addition to the headache and sickness. Dr. Stokes saw her at half-past three in the afternoon, and also ordered stimulants. From this hour till six o'clock she was very weak, and became very restless, throwing her head violently about, and arching her back; legs and feet cold. Her father found the heart's action very weak; pulse scarcely to be felt; he ordered immediately a strong mustard-poultice over the region of the heart, hot stupes to the legs, and gave her an enema of chicken-broth and brandy; after this she became stronger, and when Dr. MacDowel came late that night he found her flushed and feverish. The enemas were continued every three hours, sometimes adding Battley's sed. sol.

10th, Sunday.—Drs. Stokes and M'Dowel saw her at 9. Observed retraction of the neck; very sick all day, and great pain in back of the neck.

11th.—On Monday morning, while Dr. Stokes was in the house, the knuckles of both hands suddenly swelled, and became of a pinkish colour, and painful. She was given Prussic acid draught, which stopped the constant sickness.

12th, Tuesday.—The purple spots were paler, but some new ones appeared on her feet and ankles, which were swollen.

13th, Wednesday.—Very feverish and sleepy, and coughed a good deal.

14th, Thursday.—Measles came out all over her; she seemed easier.

15th, Friday.—Measles still very red; during the night very restless, and on

16th, Saturday morning, several new purple spots appeared on the feet, and the measles quite faded. Dr. Stokes saw her this afternoon, the ninth day of her illness. He ordered a great deal of nourishment, wine, &c.

17th, Sunday.—Continued much the same.

18th, Monday.—Great headache; the left eye squinting. Dr. Stokes saw her. Stopped giving wine. For several days after this she lay in much the same state, very feverish, and sleeping almost constantly. Dr. M'Dowel, who saw her constantly, finding very little change from day to day.

25th.—On Monday, the eighteenth day of her illness, an eruption of "Shingles" came out on her back, and increased till it was very nearly round the body, being worse on the back and chest; some of the spots very sore, and continuing so for several days.

28th, Thursday.—Great pain in the neck, and paralysis of one side of the face; the left eye staring. Iodine applied to back of neck and front of ears.

30th.—She was very restless; no sleep at night; often shrieking out as if in pain.

April 4th, Thursday.—Sickness of stomach. Very weak.

5th, Friday.—Again sick stomach. Drs. Stokes and McDowel saw her. She slept badly, and had a continual painful kind of moan, with occasional sharp screams.

6th.—Up to this, from the beginning of her illness, she knew every one when spoken to, and answered every question quite correctly, often asking the hour, day of the week, and month, and apparently quite conscious.

8th, Monday.—She was very nervous and restless.

9th, Tuesday.—Carried on a mattress into another room quite unconscious of the movement; her stomach very sick that night, then lay so quiet that her father went over to examine her, and found her very low and weak; very weak pulse. Gave her brandy, and applied hot stupes to legs and feet, which it was almost impossible to keep warm.

10th, Wednesday.—Again sick stomach; no sleep; incessant moaning, and the eyes kept constantly twitching and squinting; the head very much thrown back; extremities cold.

11th.—On Thursday morning, the thirty-fifth day of her ill-

ness, her father shaved and blistered the top of her head, hen had the whole head shaved and blistered.

Drs. Stokes and MacDowel saw her and ordered calomel. About noon she appeared relieved; the eyes better, and she was quieter; that night she was again very weak.

13th. Saturday.—Small boils came out on the back and chest; she was very restless and nervous for several days, often crying for hours, and only soothed by her sisters' singing to her.

21st.—A large abscess on the shoulder was opened; still restless and nervous.

24th.—A second abscess opened. She had several smaller ones, which gave her great pain on the head, back, and hip.

26th.—From about this day there appeared to be a very slow but gradual improvement. She was quite sensible and correct in everything she said, and knew every one, but did not remember anything of her illness.

May 8th.—She was lifted on to a small bed on castors, and was wheeled into another room, and back again at night; this has been done every day since, and she enjoys the change, but is still extremely nervous at being touched or moved.

22nd.—She remembers nothing further back than about ten days ago, which would be about the sixty-fifth day of her illness, but her memory is perfect as to everything *before* she was taken ill. She has now a good appetite, sleeps well at night, and enjoys her books and toys; her eyes are quite straight, also her mouth, except if she cries it is a little drawn down at one side.

I forgot to mention that during the whole of her illness, she continually complained of shooting pains in almost every part of the body, particularly in the forehead.

Dr. Atthill read the following :—

A. G., an infant at the breast, aged nine months, was attacked on the 14th March, with purging and vomiting, accompanied by heat of skin and great restlessness. On the evening of the same day the mother observed a red spot about one inch above the inner ankle of right leg, this was slightly elevated, and, in the course of a couple of hours, became of a dark purple colour; numerous similar spots, but of smaller size, appeared in rapid succession on both lower and upper extremities, while, at a later period, three well marked spots came out on the upper lip to the right of the mesial line. I saw the child at two o'clock P.M., on the following day (the 15th). The upper and lower extremities were then thickly covered with black spots, the majority were about the size of a split pea; some again very small, others much larger; among the latter was the one first observed on the inside of the right leg, which was as large as a fourpenny-piece; another of immense size was situated on the back of the left leg, two inches above the heel, it was oval in shape, being one and a-half inches in length, and three quarters of an inch in width. There were also some spots on the buttock, but the trunk and neck were perfectly free from them.

The child was pallid; the surface of the skin was, to the touch, apparently of the natural temperature; the eye appeared sunken, but otherwise the face did not present any remarkable appearance; he seemed, however, to be much distressed, was very restless, constantly whining and dragging at the mother's breast.

Vomiting had ceased, but the diarrhœa continued, the evacuations being pale and watery. There was not at this period the slightest symptoms of derangement of the nervous system.

Looking at the case as one of aggravated blood-poisoning, I put the child on the following mixture :—

Chloratis potassæ, gr. 30
Tinct. ferri perchloridi, ℳ. 30.
Sp. chloroformæ, ℳ. 30.
Aquæ, ℨiv.

A teaspoonful to be given every hour. Also, with the view of checking the diarrhœa, I ordered two grains of the powder of chalk with opium, to be adminstered every three hours. On the following morning, the child's condition was somewhat improved, the diarrhœa had ceased. No fresh spots had appeared, and those already in existence were unchanged in appearance. On the 17th, the general condition was much as before, but the centre of each spot now assumed that sunken silvery appearance, which has been observed in many cases of this peculiar disease. I did not in any way vary the treatment. Up to this time, there was not any symptom indicating a lesion of the nervous system, but on the 19th March, that is, on the sixth day from the first appearance of the spots, the mother remarked that the child had lost in a great degree the use of the right arm and leg. On examining the limb, I found this to be correct. The limbs were not completely paralysed, but the power of moving them was much impaired; there was also slight œdema of the right arm, with increased sensibility of the affected side, manifested by the child's crying when the affected limbs were touched, or if laid in the cradle on that side. From this period the child slowly but steadily improved. At the end of a fortnight it had regained the use of its limbs, and the spots, with the exception of the large one on the back of the left leg, had nearly disappeared. The mischief here, however, was too great to be removed by the process of absorption. Inflammation set in round its edges, and a slough, exactly similar in appearance to that caused by a superficial burn, was thrown off, leaving a large sore, which gradually healed up. The child recovered perfectly. This case was also seen by Drs. Head and Bennet.

I look on this case as one of much interest, bearing as it does on the disputed question—whether the epidemic of cerebro-spinal meningitis, and that marked by these black spots are separate diseases or different manifestations of the same poison? This case exhibited from the very commencement, in a marked manner, the black eruption, while the cerebro-spinal symptoms manifested themselves at a much later period, thus supporting, I think, the opinion that the diseases are identical.

Dr. Hayden read the following :—

Case 1.—Miss C., aged 19, of general good health, but subject to menorrhagia and occasional headache, was suddenly taken ill with acute pain in the head, accompanied with a feeling of tenderness all over the body, on Wednesday, October 24th, 1866. The pain having become more severe, she was visited within a few hours after her first illness by a medical man in the neighbourhood. She was then pale; skin rather cool; pulse regular and not remarkably quick; slight sickness of stomach, for which an effervescing mixture was given. In the course of that night the headache became still more urgent, and on the following morning the face was flushed, and other symptoms of high febrile action were present. Six leeches were applied behind the ears, and six grains of calomel were given at once.

I saw the patient in consultation at a quarter past one P.M., on the 27th. The face was then pale; pupils contracted, and eyes averted from the light which could not be borne. There was constant moaning and complaint of pain in the vertex and back of the head. Pulse 66, labouring and irregular. There was a murmur with the first sound of the heart, audible at the base. The head was shaved and blistered, and subsequently dressed with mercurial ointment, gr. i. of calomel was given every hour, and a warm foot-bath, containing mustard, to be frequently repeated. I saw her again at half-past seven that evening. The pulse was then 84 and full; respiration rather laboured; tongue moist; skin warm and moist; no cutaneous hyperæsthesia or sickness of stomach; bowels and kidneys acting regularly; mercurial inunction to be continued.

October 28th.—I visited the patient at ten o'clock this morning, and found her much improved, she had slept several hours in the course of the night; pulse 90, regular, and moderately full. No cardiac murmur was then to be heard; she lay with the head retracted, and avoided light;

there was partial ptosis of the right eye. A number of dark blotches resembling vibices, and not affected by pressure, had appeared upon the hands, arms, and legs, since last visit.

29th.—Diarrhœa of a biliary character, and slight pain in the head last night; the latter had ceased at the time of visit, but the skin was hot; the conjunctivæ injected; the pulse 102; and a systolic murmur was again audible at the base of the heart.

No urine had been passed since six o'clock P.M. on the preceding day; patient menstruating. The calomel was stopped, and ʒss. of mercurial ointment was directed to be rubbed into the groins and axillæ alternately, twice a-day. A pill consisting of gr. ss. of powder of digitatis, and gr. iii. of compound squill pill was ordered to be given three times daily; simple chalk mixture to check the diarrhœa; and warm jars to be applied to the feet.

30th.—Ten A.M., patient much better; slept last night; pulse 96; skin cool; urine passed in large quantity during the night; conjunctivæ no longer injected. Finding the patient so much improved I took my leave, deeming it unnecessary to continue my attendance, and leaving her in charge of her ordinary medical adviser. On the afternoon of that day (October 30th), at six o'clock, she suddenly became alarmingly ill, "rattles" were heard in the throat, she became pulseless and cold, but continued to be conscious. Within a few minutes she was visited by the medical man in charge of her, and died in his presence shortly after his arrival, without convulsions, and apparently of syncope.

Thus, this girl's illness commenced with pain in the head, sickness of stomach, and high fever. Four days subsequently there were contraction of the pupils and photophobia, injection of the conjunctivæ, ptosis, retraction of the head, and dark ecchymosed blotches on the surface. There can be no doubt, therefore, that the cerebro-spinal symptoms preceded the cutaneous, and in this case assumed the importance of primary manifestations.

Case 2.—Miss C., aged 19, residing a short distance from Dublin, was attacked with bilious vomiting on getting out of bed on Tuesday morning, April 23rd, 1867. On the evening of that day she was seen by Dr. Monks, who found her slightly incoherent, and the entire surface of the upper and lower limbs mottled with a dark red rash, interspersed with a few unhealthy looking vesicles. A blister was applied to the nape of the neck, and gr. v. of sulphate of quinine were given every fourth hour. At seven o'clock the following morning Dr. Monks was hastily summoned to visit his patient, and found the red spots now become dark and much larger, and the patient in a state of alarming prostration. On the preceding evening he had expressed suspicions as to the nature of the affection, but he now fully diagnosed it as an example of so called "Black Death."

I saw the patient, in consultation, at ten o'clock on the morning of the 24th. She was then unconscious; pupils widely dilated and insensible to light; veins of scalp distended; loss of power of deglutition. Liquids introduced into the mouth immediately flowed out. She was remarkably restless, and struggled to get out of bed. The feet, legs, thighs, and buttocks were sparsely covered with dark spots of irregular figure, and varying in size from that of a grain of shot to a shilling-piece. These spots were in colour nearly black, slightly elevated, and not affected by pressure. Amongst these were dispersed, at long intervals, a few small undeveloped pustules.

The eruption was likewise visible on the hands, arms, and neck, and in a much less degree on the face and trunk. The general surface of the skin was of a dusky hue, and cold. Pulse 138, and weak, but regular; respiration unaltered; evacuations involuntary. The head was directed to be shaved and blistered, and then dressed with strong mercurial ointment.

Œnemata of sulphuric ether and spirit of turpentine—of each ʒi., with ʒss. of brandy in ʒii. of strong beef-tea, to be given every second hour; the quinine to be continued, and small quantities of brandy given by the mouth at intervals.

On the evening of that day, when seen by Dr. Monks, she was conscious; the pupils were less dilated, and fluids were swallowed readily.

On the morning of the 25th a still further improvement had taken place, but in the afternoon the patient had lost ground, and was much weaker, and at one o'clock that night, after a convulsive spasm, she died, evidently of asthenia.

It was subsequently discovered that the nurse in charge of the patient, conceiving herself entitled to have an opinion, and in the exercise of it, considering that the stimulants had disagreed with the patient, discontinued them contrary to orders after the last professional visit. To this circumstance the sudden unfavourable change in the patient's condition is probably due.

Opposite the window of the room in which this girl slept, and about eight yards distant from it, was a cow-shed, in which cattle were fattened for the market, and in the room itself the air was disagreeable and oppressive.

In estimating the diagnostic value of symptoms, it is necessary to distinguish primary or essential, from secondary or accessory phenomena; and in making this distinction, the order of succession, and the pathological relationship of the symptoms should be considered.

Judged by this rule, I feel bound to say that the cases which have come under my observation tend to support the opinion of Dr. Gordon, that the disease which has recently appeared in this country, and received the provisional designation of "Black Death," is only cerebro-spinal meningitis, with the accessory manifestation of cutaneous ecchymoses and eruption. I grant that there is great difficulty in explaining the genetic connection between the pathological and vital conditions indicated by these two groups of symptoms—namely, an inflammatory organic lesion of the cerebro-spinal meninges, and deterioration of the blood.

Short notes of two cases, under the care of Mr. DARBY, of Bray:—

Case 1.—Margaret Brady, aged 15 years, admitted to the Rathdown Hospital, at two o'clock, P.M., 22nd March, 1867, reported as having been in perfect health up to the evening of 19th inst., when she was suddenly attacked by a rigor, followed by a convulsive fit, after which she totally lost her hearing, complained of headache, and vomited.

On admission her skin was hot; pulse quick; tongue clean, but fringed with apthous ulcers, as if the edges had been bitten; her eyes were bright, watchful, and wild, pupils medium size, acted slowly under the influence of strong light; her head drawn sharply back upon the neck; was constantly muttering, moaning, and grinding her teeth. She cried out whenever any part of the surface of her body or limbs was touched. Spots of a dark colour, nearly black, of varied form and size, were found on the fore-arms and legs, resembling, for the most part, the marks of an itch or other papular eruption that had recently died away. There was also an ecchymosed patch on the right thigh. For two days after admission fresh spots continued to appear, and some of the old ones began to fade to a greenish-yellow, and some to disappear altogether

On the 27th all the spots were fading.

On the 1st April there was not a trace of any eruption or discolouration on the skin; other symptoms continued without any marked alteration. The girl wasted, sunk gradually, and died of exhaustion on 23rd April, 1867.

The post-mortem revealed lymph on the surface of the pons varolii and medulla oblongata; about four ounces serous fluid in the ventricles extended into the spinal canal. The membranes of the cord were much congested.

Case 2.—Thomas Carroll, aged 10 years, was admitted to hospital, from the workhouse school, on the 11th April, 1867. Reported not to have eaten his food well on the previous day, and spat up a little blood; on rising from bed this morning some red (blood) spots were observed on his skin, he spat up more blood, and was consequently

sent to hospital. I found him at noon lying quietly in bed, not complaining; his pulse was 90; tongue furred; gums bleeding; skin cool. Face, limbs, and trunk were thickly dotted with black spots, elevated slightly, and varying in size from a grain of shot to that of a pea. Two ecchymosed patches—one the size of a shilling, the other as large as a penny-piece—were observed on his legs; his belly tumid. Ordered an oil and turpentine draught, immediately, which produced a copious, tar-like stool, free from smell. Lemon juice was freely given, and ten drop doses of spirits of turpentine every fourth hour. This treatment, with nourishing diet, was continued up to 22nd (11 days), when he was discharged cured.

I have thought that some analogy existed between these two cases, as some of the spots on the skin in either case bore a strong resemblance to the other—the local inflammation in the case of Brady being altogether absent in Carroll, forms the chief feature of difference between them, and as that is a point in the prevailing epidemic disease upon which a difference of opinion exists in the profession, I place the cases in juxta-position.

The following letter was read from Dr. Crooke, of Macroom:—

"May 6th, 1867.

"Dear Dr. Belcher,—I have read with great interest your case in The Medical Press and Circular of May 1st. . . . . I entertain no doubt that it was a case of fever. I have attended in the Fever Hospital here, during the past twelve months, six cases closely resembling it in most of the details. I may state that I treat in this hospital an average number of about twenty throughout the year; they are chiefly household servants, male and female, sent in from a wide area of country. They are usually well fed and nourished. If a change is made in Cullen's aphorism thus: "Initio febris gastricus, progressu et versus finem typhus," it will describe this form of fever. The first case of this class which I treated last year occurred in the month of February, and bore a resemblance to yours, so remarkable that I will give you an extract from my notes of it:—S. W., aged 20, nursery governess to Lady ——, a tall fair German, of considerable personal attractions, and of nervous temperament. Her illness, as in your case, was caused by exposure to cold. During the first ten days she suffered from gastric fever with bilious vomiting; pulse not above 90; there was considerable prostration of strength, slight headache, and heavy pains in the back and thighs; excessive sleeplessness; thirst; tongue red at the edges, foul occasionally in the centre, and generally moist. At the end of ten days there was a complete remission for thirty-six hours, and I thought she was going to get well, but a different train of symptoms followed. Sleeplessness returned, and with it delirium appeared for the first time, then followed jactitation of the limbs, picking of the bed-clothes, tympanitis, involuntary evacuations, coma, and death ensued on the eight day of the second stage. The duration of her illness was thus eighteen days, about the same as in your case. On the day following her death her countenance became of a livid, almost purple colour; her stomach became enormously distended on the next day; her face was almost quite black; there was a putrid odour in the room, and, as it was evident that decomposition was advancing rapidly, I had her removed to her grave without further delay. I have notes of five other cases treated during the past year, two males and three females—all were young, ages 16, 19, 20, 20, 22 years. The gastric stage varied in duration from seven to ten days; the typhoid stage from nine to fifteen days—all recovered. In each of these five cases the attacks were distinctly traceable to contagion, pure typhus having existed in each house from which they were brought. In three of these cases an abundant eruption of petechiæ occurred when the typhoid symptoms occurred. Do you not think that the disease, termed by Dr. Mayne and others 'cerebro-spinal arachnitis,' is a specific fever of a malignant character, and that the inflammation of the membranes which invest the brain and spinal marrow, is one of the effects of a poisoned and morbid condition of the blood, and not the essence of the disease? There is nothing new in specific fever terminating fatally within twenty-four hours; when malignant scarlatina prevailed it was not uncommon to meet cases which succumbed to the disease within this period. I witnessed at least twelve such, and heard of many others. The leading symptoms were bilious vomiting, low delirium, rapid prostration, coma, and death. The term "Black Death" may well have been applied to some of these cases; for, within twenty-four hours after dissolution, the countenance assumed a dark purple hue, and decomposition set in so rapidly that the remains had to be hurried from the view of the horror-struck relatives. I shall never forget one dreadful instance of this kind which happened in my neighbourhood, when a most promising young man of 19, was carried off by this dire disease in about eighteen hours from its first invasion. I am no believer in this new 'sensation tale,' that the 'Black Death' of the 'middle ages' has reappeared. . . . . I am, sir, yours, &c., Warren Crooke."

Conclusion of Meeting held on the 22nd of May. In our next issue will appear the discussion which took place on the 24th of May.

MEETING OF THE GENERAL MEDICAL COUNCIL OF EDUCATION AND REGISTRATION.

SESSION 1867.

Wednesday, 29th May.

The President, Dr. Burrows, in the Chair.

Present—Mr. Cæsar Hawkins, Mr. Cooper, Dr. Acland, Dr. Paget, Dr. Embleton, Dr. Storrar, Dr. Alexander Wood, Dr. Andrew Wood, Dr. Fleming, Mr. Syme, Dr. Allen Thomson, Dr. Aquilla Smith, Mr. Hargrave, Dr. Leet, Dr. Apjohn, Sir D. J. Corrigan, Bart., Dr. Sharpey, Dr. Parkes, Dr. Quain, Mr. Rumsey, Dr. Christison, Dr. Stokes, and Dr. Francis Hawkins, Registrar. The roll having been called,

Dr. Risdon Bennett, the newly elected representative of the Royal College of Physicians, was introduced by Dr. Paget, and took his seat in the Council.

The President then delivered his inaugural address as follows:—

Gentlemen—Before we resume our accustomed labours at this Council table—labours which have been so often devoted to the improvement of the social and scientific position of the great commonwealth of the medical profession throughout the British empire—I will crave permission to offer you a few introductory remarks before we proceed to the regular business of the session. Your deliberations upon several subjects of importance, subjects which have anxiously and largely occupied your attention in former years, were terminated during the last session, and your conclusions were embodied in certain reports and recommendations which were printed and circulated throughout the country. To my mind, one of the most important topics which engaged your attention last year was the report of your Committee upon General Education, that is to say, the report upon the subjects which were to constitute the preliminary examination of students in general education. Of all the labours which have been bestowed by this Council upon various subjects, I am of opinion that none is likely to be more productive of benefits, present and prospective, to the whole profession individually and collectively, than the establishment of a compulsory examination in subjects of general education, for all persons, before they are permitted to enter the medical profession. If the medical practitioner is still to maintain his proper position and influence among the educated classes of society; if our profession as a whole is still to bear the name and be regarded as one of the

learned professions, then undoubtedly those who enter upon it ought to have received that amount of mental culture which would render them capable of passing a preliminary examination in subjects of general education, which should be equivalent at any rate to the examinations passed by those who are entering upon the clerical profession, the legal profession, the army or the civil service of the country. Unfortunately, the Medical Act under which we are assembled here, and by whose provisions we are regulated, did not give us as a Council any power to encourage or to distinguish individuals of high literary attainments, or of great professional knowledge; but that Act of Parliament has given us power to establish a standard of education below which we can say that no man is fitted to enter our profession; and I do trust, therefore, that the Council will agree among themselves to keep up the standard to as high a point as the circumstances of the case will permit. It is true, indeed, that this Council cannot assume to itself the credit of having initiated these examinations in general education of students about to enter the medical profession, because of course the great universities of the land and many other corporate bodies had instituted examinations of this kind prior even to the formation of this Council. But then these examinations in general education were not preliminary examinations. They were by no means uniform; they were passed at most irregular times, while the student was, or at any rate ought to have been, engaged in professional studies, and even sometimes just prior to the final qualifying professional examination of the individual. Now, it must be obvious to all that examinations in general education, conducted at such irregular and at such unsuitable times, could not attain the object which this Council had in view, and could afford us no kind of security that students had been sufficiently instructed in subjects of general education before they were permitted to enter upon the curriculum of professional study. During the last session, gentlemen, we arranged and circulated in a convenient form our code of regulations and recommendations—as far, indeed, as they had been completed and perfected upon several points—first upon the subject of preliminary examination of students in general education; and also upon the important subject of the mode of the registration of medical students; thirdly, upon the curriculum of professional education; fourthly, upon the successive professional examinations; and fifthly, upon the supervision of all examinations held by the qualifying bodies. I say we circulated these recommendations in a convenient form as far as they were then perfected. No doubt there are many that yet demand a far greater improvement. In respect to the last-mentioned of these regulations—that is to say the supervision of examinations—you happily persisted in your former resolution, that the visitation of examinations should be continued as before; but, in your last session, you also went further, and passed an important resolution, the words of which I have here before me. You resolved, that the visitation of examinations should be continued as before, and you further determined that the reports of the visitors should apply to every part of those examinations, and should include a statement of the facts observed, and of the opinions of the visitors as to the efficiency of the examinations, as also remarks and suggestions upon any defects perceived in them. Now, I honestly believe that if any impartial person would take the trouble to peruse these reports of the visitors of examinations for the last two years—I wish I could say peruse the reports of all the examinations, for there are one or two certainly very pitiable exceptions—he would find there not only grounds for the necessity which exists for the supervision of these examinations, but he would also find unequivocal proofs of the benefits already obtained by the plan which has been hitherto pursued. I would not wish you, gentlemen, or the public out of doors who may become acquainted with what I am now stating, to suppose that I am so far an optimist in regard to what is done by this Council as to assert either that the supervision of examinations has been conducted upon a system, or by persons whom theoretically I should conceive the best adapted for the purpose. The supervision of the examinations, however, which are carried on by universities and colleges of great antiquity and repute, must necessarily be, to a certain extent, an invidious task, and it is a duty requiring to be performed with great tact, prudence, and forbearance. A more rigid, uniform, systematic plan for carrying on these examinations, might, in the first instance, I fear, have met with more opposition, have given rise to heartburnings, and have afforded far less satisfactory results than have been obtained by the cautious, tentative, and more imperfect system which we have hitherto adopted. In the first series of reports of visitors of examinations, we find various remarks and suggestions which have not only been taken in good part by the qualifying bodies—and those of the very highest standing and character—but they have been acted upon by several examining bodies without delay; and you will find, in the reports of the visitors of examinations of this year, the fruits of suggestions made in the reports of the preceding year. Gentlemen, I think there is great cause for congratulation that you should have commenced and carried on this system of supervision of examinations, without more seriously hurting the susceptibilities of the honourable and distinguished men who are engaged in conducting these examinations; and the results which we have already obtained give us an earnest of great improvement in the method of ascertaining the fitness of candidates to enter upon the varied duties of their profession. Let me here pause for one moment, and just take a brief review of what this Council is doing, and has so far effected, to insure throughout the United Kingdom that the medical practitioner should be better fitted for his social station, and also more equal to the emergencies of his responsible calling. If this Council persist in enforcing a good preliminary examination in subjects of general education upon all persons who are about to enter the medical profession, and before they are allowed to register themselves as medical students; if the curriculum of medical study be established, and be sufficiently long to enable persons of ordinary ability to acquire a sound knowledge in various branches of medical and surgical science; and if the professional examinations are conducted at regular stages and proper intervals during the curriculum; and if this Council can be assured, through their visitors, that these examinations are really efficiently and impartially conducted—then I say that the Medical Council have done their duty in this matter of education, to the profession and the public, and they may bid defiance to their detractors out of doors—and we have those who have endeavoured to detract from our credit—who carp at, and are jealous of the authority of this central controlling body, and who are, therefore, desirous of impairing the prestige and influence of the General Medical Council. Among the arduous tasks assigned by the Legislature to this Council, as representing the interests and wants of the whole medical profession of the United Kingdom, none was beset with more inevitable difficulties than the preparation of the Pharmacopœia which should supersede the Pharmacopœias of the College of Physicians of London, of Edinburgh, and of Dublin. The reduction of the Pharmacopœias of the several colleges into one work for general use throughout the United Kingdom, had become a great want, an absolute necessity, and although this object had been previously attempted more than once, the attempt had failed. The British Pharmacopœia of 1864, a work of great labour and merit, had indeed accomplished this object, and was a manifest proof that this Council had the will and the ability to cope with, and overcome, difficulties which had previously proved insuperable. Although the Pharmacopœia was not so favourably received as we should have desired, still, considering that on its appearance the work was, to a certain extent, an intruder everywhere—perhaps a *parvenu*—superseding the old established Pharmacopœias of the several divisions of the United Kingdom, we ought not to be surprised that it

met with a rather cold reception. Gentlemen, the Committee entrusted by this Council with the preparation of a new edition of the British Pharmacopœia having completed the duties assigned to them, and it is impossible to mention this subject without recording how deeply the Pharmacopœia Committee were indebted to their indefatigable Honorary Secretary (Dr. Quain), without whose energy, tact, and perseverance, I firmly believe the labours of that Committee would hardly yet have been concluded. However, the Executive Committee have published the work in accordance with the resolutions of this Council. I can hardly suppose that any work of a similar kind ever had more patient labour bestowed upon its preparation by its editors than this Pharmacopœia—and I must here mention the labours of Professor Redwood, and how ready he was upon all occasions, as far as his judgment would permit, to accede to the wishes expressed by members of this Council; neither can I suppose that any work ever received a more careful and searching revision both by the scientific and accomplished members of this Council, as well as by skillful pharmaceutists to whom the work was submitted who were not members of this Council. As far, therefore, as an opinion can be formed from the remarks and criticisms of public journals, we may anticipate a most favourable reception to this edition of the British Pharmacopœia, and that it will prove a most favourable standard work for general use for the profession throughout the empire. Gentlemen, it was only yesterday that your Executive Committee determined that the official announcement of the publication of the Pharmacopœia should be made in the *Gazettes* of London, Dublin, and Edinburgh, and that after a certain day our new edition of the British Pharmacopœia will be the only recognized Pharmacopœia; and it is very much to be hoped that after that period all loyal men, whether physicians or surgeons, will employ the new edition to the exclusion of all former Pharmacopœias. Unless this course is generally adopted, we cannot expect the Pharmacopœia to accomplish the great good that it is capable of effecting. Gentlemen, the last topic to which I will allude is the course of the negotiations of the Executive Committee and your President with the Government upon the Medical Acts' Amendment Bill. It will be in your recollection that towards the close of your session of last year you came to a resolution that a letter should be written to the then Home Secretary, Sir George Grey, and that this letter should be accompanied with a draft of the Medical Amendment Acts Bill as approved by this Council, and also with a statement of the reasons why this Council thought it right to deviate in certain particulars from the draft of the Bill we had received from the Home Office. In the concluding paragraph of that letter it is stated: "And I may ask that you will at your earliest convenience be pleased to receive a deputation from the Council to consider the Amendment in question." Now you are aware that shortly after that period the Government resigned, and Sir George Grey necessarily went out of office, therefore the President and the Executive Committee had no opportunity of seeking that interview with Sir George Grey. However, you will recollect that at a subsequent meeting of the Medical Council on May 29th, 1866, you passed a resolution in the following words: "That it be delegated to the Executive Committee to confer with the Government regarding the proposed Bill—the Amendment to the Medical Acts, and to press on the Government the expediency of its being adopted as a Government measure, and at the same time to state that the Medical Council are of opinion that unless the Bill be introduced by the Goverment it would be unadvisable to proceed with it." Now, in accordance with that resolution, at the first meeting of the Executive Committee following your separation last year—17th of July—the Executive Committee determined, as deputation, to wait upon the new Secretary of State, Mr. Walpole, and your President, accompanied by Dr. Andrew Wood and Dr. Aquila Smith, and the Registrar, waited upon Mr. Walpole, who received us kindly and courteously, and listened to all we had to say with great attention. We endeavoured to put before him the feelings and wishes of the Council, and the absolute necessity there was of an amendment of the original Act of 1858. Indeed, Mr. Walpole himself seemed to be conscious of the defects of that Act, and he led us at that time to hope, without any definite promise, that he would take up the subject at a later period, and he also intimated that he would be happy in the ensuing autumn to see your President, and to go into the matter with him. Therefore, when the autumn had arrived, in the month of November, in accordance with the wish so expressed by him, I put myself in communication with Mr. Secretary Walpole, both by letter and by a personal conference, and endeavoured, as far as I could, to reiterate all the statements and arguments used by the deputation of the Executive Committee in July, 1866. In consequence of some delay in getting any reply to this communication, I had occasion to write to that gentleman more than once, but on the 2nd of February of this year, Mr. Walpole wrote a letter, stating that, although he was aware of the necessity for an amendment to the Bill, he felt himself so burdened with the various other bills which the Government had on hand, that he could not then promise to undertake it, and he suggested that we should endeavour to obtain the assistance of some private member, either in the House of Commons or House of Lords, who would take up the Bill. But as that was not in accordance with the expressed wish and resolution of the Council, of course it could not be acted upon, and I intimated to Mr. Walpole that such was your determination last year. The thing then remained to a certain extent in abeyance, and I thought it better to press Mr. Walpole for another interview, which was granted to me on March the 11th. I then again brought the whole subject before him, and upon that occasion I met the legal adviser of the Home Office. I endeavoured to impress upon Mr. Walpole what the Profession and this Council expected from him, more especially as he had himself introduced the original Bill into Parliament. He promised that I should hear from him shortly what he had decided upon. However, that communication was so long delayed, that it was absolutely necessary again to remind him of the necessity of learning his final decision before the Council met, and it was only last week, since you received your summons to attend at this board, and since the programme of business was issued, that I have received from him a very important communication suggesting modifications in one of the clauses of the Medical Act's Amendment Bill, agreed upon by Council last year. That is a matter of such importance that I will not enter into it now, but merely mention that I hope you will, in accordance with the recommendation of the Executive Committee, think it sufficiently urgent to take it into consideration at an early hour of this day's proceedings. I have thus, gentlemen, endeavoured succinctly to give you a sketch of all that has transpired here since we separated last year. There still remains, of course, many questions of great interest to be discussed and settled at this meeting, although I believe that some of the greatest difficulties that surrounded your onward progress have now been surmounted. The profession out of doors looks to you as a body to sustain its place in the social circle, and to obtain, if possible, from the legislature better means of preventing the quack and impostor from personating the regularly educated practitioner. Gentlemen, I trust we shall enter upon our discussions this year with all that calmness which befits our station, and endeavour, as far as possible, to make our observations with brevity of diction, which will shorten our labour, and with courtesy of manner and avoidance of personality, however much we may differ in sentiment, feeling assured that the opinions of men who sit around the council-table are not likely to be swayed by any charms of rhetoric, nor their cool and mature judgments biassed by any violence of language. Gentlemen, I now conclude, and you will please to proceed to business.

A communication from the Home Secretary was laid before the Council containing the following passage :—

"I must remind you that the difficulties which have arisen in respect of this Bill are in no degree chargeable to the Home Office, but they arise from the fact that the Medical Council had deviated from the form of Clause 11, as settled last year by that office. Should the Medical Council be willing to adopt in place of Clause 11 the amended clause that accompanies this letter, I do not think that the Government would offer any opposition to the Bill; but as the Bill is not a Government Bill I must express my concurrence with the opinion expressed by Sir George Grey, contained in Mr. Murdock's letter of the 11th of May, 1866, that it would be well for the Medical Council to entrust the Bill to some independent member."

PROPOSED CLAUSE.

"Every person who has resided in the United Kingdom for a period of not less than twelve months immediately previous to making his application, and who legally possesses a colonial or foreign degree, licence, or other diploma, from a university, college, or other body which qualifies him to practise medicine or surgery in the colony or foreign country where such degree, licence, or other diploma was obtained, shall be entitled to be registered under the Medical Act, 1858. Provided such degree, licence, or other diploma shall have been granted by a university, college, or other body which in the opinion of the Medical Council or one of her Majesty's principal Secretaries of State, grants decrees, licences, and diplomas after such course of study and examination as guarantees the possession by the holder of sufficient knowledge and skill for the efficient practice of medicine and surgery."

The clause as originally proposed by the Home Office, and that adopted by the Council last year, were then read.

Dr. Paget—I beg to propose that a committee be appointed to take this subject into consideration. It appears to me that Mr. Walpole's communication entirely puts an end to the small hopes that were still left to us of carrying through any Medical Acts Amendment Bill in the present session. Considering how completely the House of Commons is at present and will be engaged with the English, Scotch, and Irish Reform Bills, it seems to me utterly impossible that any measure can be effectually introduced this session, even under the favourable circumstances of its receiving the support of the Government. But if I understand Mr. Walpole's communication, it amounts to this, that the Government only promises that it will abstain from active opposition to the measure. I think our best plan will be to refer the whole matter to a committee to consider what is best to be done under the circumstances, and to report to the Council as speedily as possible. I think this is the more advisable, because, speaking for myself, I think there are serious objections to the condition that Mr. Walpole has annexed to the consent of the Government, the admission of this clause with reference to the registration of persons holding foreign and colonial diplomas. I am well aware that the Council individually and collectively have the best possible feeling towards the holders of foreign and colonial diplomas, whether Englishmen or foreigners; and no doubt there are many instances of persons distinguished in science, like Dr. Séquard and others, whom the Council would willingly place on the register without requiring from them any diploma or licence from English qualifying bodies. But Mr. Walpole's proposition, which agrees in the main with that of Sir George Grey, is not that individuals, but that certain universities and colleges should be recognised, and that any person holding their diploma should be entitled to be registered. It does, no doubt, propose that the Council should have the power of naming the universities; but it also gives the same power to one of the Secretaries of State. So that it might happen that the Council might be compelled to register the holder of a diploma from some homœopathic or other college favoured by a Secretary of State, although they might consider him wholly unfit to appear as a British practitioner. Now, I think that is exceedingly objectionable, and almost as great an absurdity as the granting of medical degrees by the Archbishop of Canterbury. If this matter were a mere question affecting the interests of the qualifying bodies, I do not think the Council would allow it to weigh against what seems reasonable and fair. If it were possible to put the foreign and colonial universities and colleges on an equality with the English, I feel sure the Council would do it, but it is not possible—at least, I do not see how it can be done. The Council is invested with certain authority in regard to the British diplomatizing bodies—that of inquiring into the course of study, visiting the examinations, representing to the Privy Council, and suspending the power of granting licences, which it does not possess and could not exercise with regard to foreign and colonial bodies. Those powers are of the utmost importance with reference to the functions of the Council; and by their exercise the Council have established a minimum of qualifications for practitioners, both in general and professional knowledge, by means of which they hope to elevate the social status of the profession, so that the most ignorant practitioner in the country may be a decently well-informed man. Let me remind the Council of the manner in which this clause might work. We might have a Foreign Secretary who felt an interest in some country with which we were in alliance, or upon "touching" terms; or a Colonial Secretary, interested in some colony that was beginning to quarrel with us. I think our present course is to appoint a committee.

Mr. Rumsey—Although nominated by the Crown to the seat I have the honour to hold at this Council, I cannot avoid on the present occasion expressing my deep surprise and regret at the manner in which the Government of this country has received the communication made by the Council through you, sir, after our last session. I do not wish to say more than is absolutely necessary, but I do conceive that the Council, which has been called into being by the Legislature of the country, and placed in relation with one of the highest departments of the State—the Privy Council—had at least some claim upon the Government to be regarded as an authority in the matter of the Medical Acts Amendment Bill; that the Government should certainly, if they did not approve of the provisions of the Bill, or any one of them, have given reasons for such disapproval. As far as I understand the communication which has been made to us to-day, the Government have not condescended to give the slightest reason for the alteration they have made in the clause of last year. The Report of the Committee on the Draft Bill last year gave most ample reasons for the proposed change; and it would have been only courteous, to say the least, in the Government to give an answer to that Report.

Mr. Cæsar Hawkins seconded the motion of Dr. Paget.

Mr. Syme said that he thought the subject required a more speedy expression of the Council's opinion than that proposed by Dr. Paget's motion. He agreed with Mr. Rumsey that the Council had great reason to complain of the Government for their indifference and apathy; but they had now gone beyond indifference, and had actually insulted the Council. (Hear, hear.) They had taken upon themselves duties which Parliament had delegated to the Medical Council as among its principal functions. It was not a mere matter of etiquette; but it was a proposal the adoption of which would render the Council and its actions utterly ridiculous. Who could doubt that some Secretary of State would be disposed, through private friendship or representations of various kinds, to nominate some person who would be a disgrace to the body? Instead of appointing a Committee, he proposed that a communication should be addressed to Mr. Walpole, to the effect that the Medical Council could never entertain such a proposition. We could then communicate with his successor; and I have reason to believe that that communication would be of a very different kind.

[For continuation, see page 539.]

The Medical Press and Circular.

"SALUS POPULI SUPREMA LEX."

WEDNESDAY, JUNE 5, 1867.

UNIVERSITY REPRESENTATION.

We have several times insisted on the rights of the unrepresented Universities of the United Kingdom to be admitted to the privilege of sending members to Parliament. The Universities that have long exercised this privilege have always been most influential constituencies, and the members returned by them worthy of their electors. This is not a question of party. Learned bodies of this description are eminently calculated to leaven the wider electoral districts of boroughs and counties, and secure for the more highly educated classes, as such, a voice in the affairs of the nation they may not otherwise acquire, but certainly ought to possess. Yet, the creation of University constituencies cannot set class against class. Medicine, Law, the Church, the Arts and Sciences—all have their votaries amongst the graduates, to say nothing of the large numbers of what may be called the purely educated, in contradistinction to the strictly professional element. If Medicine in some Universities be in the ascendant, it would in this manner obtain only indirect representation; and should the movement lead to half-a-dozen Medical Graduates taking their seats in the House of Commons, we think the country might well be congratulated on the result.

The many questions that come before the Legislature on which Medical opinion ought to be expressed are well-known to our readers, and we believe the public would be glad to see the Profession lending its aid on these occasions. Had the Body Medical always been adequately represented in Parliament, half the social reforms for which we now cry would have been long since effected. Probably, an efficient Department of Public Health would have conferred inestimable benefits on the community, and the scandals that have disgraced our Poor-law administration would have been avoided. No class of men so thoroughly devotes itself to doing good as the Medical Profession, and a large majority of the agitations for social reforms originate in its ranks. At the present moment, the Vaccination Bill is a proof of the necessity for a race of Medical Statesmen. Yet it is not as a class that we just now advocate our claims to a share in the Government. If we do not possess sufficient interest in the Universities to secure some of the seats, we must wait until a larger number of practitioners become graduates.

In the University of London, a preliminary movement to secure the return of a Medical Graduate has already commenced, and when we look at the calendar, and see the great preponderance of the medical element, we feel that success is certain. And so of the Scotch Universities. At least, one of the two members proposed to be bestowed on these bodies ought to be a medical man. We have no sympathy whatever with the notion that a non-graduate ought to be allowed to represent any University. Every one of these bodies possesses ample choice in its own ranks, and the idea of going beyond should be at once repudiated.

Respecting the concession that has been made, the Government can lay claim to no great *liberality*. The injustice of the Metropolitan University only having one member, while Oxford, Cambridge, and Dublin have two each, has already been pointed out in our columns, and the offer of two members between the four Scotch universities is equally niggardly. Still, on the principle that "half a loaf is better than no bread," we may accept this instalment from the hands of our very *Conservative* remodellers of the Constitution.

In the Scotch Reform Bill, which has been printed for the use of members, this very moderate concession to the Universities is to be guarded by a series of restrictions infinitely more unfair than those that were proposed in other cases, but relinquished on "gentle pressure." As the Bill now stands, only those are to have a vote who belong to the General Councils of the Universities, and have attended certain classes. Nothing could be more unjust, and the whole body of graduates must of necessity protest against the iniquity. We want no close boroughs—no petty monopolies. Every Graduate of a University ought, as a matter of course, to possess the franchise, and to exercise it by means of voting papers. Otherwise only discord will ensue. There is not the shadow of a pretence for the proposed restrictions, and unless they are at once withdrawn we hope every Graduate in the kingdom will bring all his influence to bear on Members of Parliament with a view to defeat the most unjustifiable restrictions ever devised by the most thoroughly Tory politician. One instance of the iniquitous manner in which these restrictions will act may suffice. One of them would deprive of the franchise the Medical Graduates of St. Andrews, who obtained their degrees before the New Constitution was conferred on their University—that is, before 1863. This would absolutely exclude those who graduated during the whole time that Dr. Day was the Professor of Medicine—notoriously a time in which the examinations were peculiarly thorough and searching. It is well-known that Dr. Day did much to raise the standard of the University, which, under his auspices, greatly increased its renown, and St. Andrews' men, who obtained their degrees during that period, are wont to boast of the distinction of

being "Day's Graduates." And yet, forsooth, these men are to be deprived of the franchise to gratify Tory partiality for restrictions, or to enable the *Conservatives*, under the banner of Reform, to create close boroughs, more dangerous to the community than Old Sarum itself. Never was a more transparent trick attempted to be palmed off, nor a greater insult offered to such a class of men. Better no University representation at all than such a sham as this.

We rejoice to find that the St. Andrews' Graduates, alive to the injustice proposed to be inflicted upon them are already at work.* The St. Andrews' Graduates' Association, which on a former occasion did good service, has been resuscitated, and the most active steps are being taken to bring under the notice of the Government and of Parliament, the way in which these restrictions will destroy the University representation, and deprive of the franchise a body of men who, of all others, are most fitted to exercise it.

The restriction proposed would be, in effect, so scandalous, that we can only attribute it to ignorance or oversight on the part of those who devised it. When we state that there are some 3000 medical graduates of St. Andrews in Great Britain, all of whom have passed a stringent examination in every branch of the Profession, the immense majority of whom possess other medical and surgical diplomas; many of whom hold the highest appointments in our hospitals and colleges; but only some 30 or 40 of whom would, by this bill, be entitled to vote, we have said enough to prove that the most bigoted supporters of every species of electoral corruption will have the greatest difficulty in defending the proposal. The restriction is, in point of fact, so outrageous, that we cannot for a moment believe that either Lord DERBY or Mr. DISRAELI can be aware of the manner in which it will operate; and we repeat that it would be better to have no University constituencies at all, than that, under pretence of granting them, the General Council should be erected into close boroughs, with only their own interests to serve and their own monopolies to uphold.

The Medical Profession knows to its sorrow what corporations are capable of. Do we not daily groan under the incubus we are obliged to support? Are not most of our corporate bodies governed by a select self-elected few, who constitute themselves in each case into an irresponsible power, and resist every effort for reform? They impose upon us grievous and heavy burdens, but they themselves will not move a little finger to help us to bear them. They sap the life-blood of the Profession and absorb its wealth—for what? To support their own dignities, and keep up their corporate monopolies. When we did obtain a so-called Medical Reform Bill in 1858—what was our gain? Another corporate body created—the Council. To represent—whom? The old corporations—that is, their governing bodies, for out of these was it made. They provide its constituent parts; they regulate its action; they, through it, defend their own interests and perpetuate their own monopolies, while their members—the great body of the Profession—are left out in the shade. Yet, no! there is one exception! One thing is graciously permitted us, which is not only not monopolised by the corporations, but is not even *shared* by them. We have the one great privilege of *paying* for all this.

* The report of their meeting, although in type, is unavoidably postponed.

THE claims on our space by the valuable Reports to the College of Physicians of Ireland, on the new Epidemic, and by the important proceedings of the General Medical Council, as well as the Reports of the Irish Medical Association, and Royal Medical Benevolent Fund Society of Ireland, which appear in our Irish Edition, compel us to withhold our own comments on the *res gestæ* of these assemblies. The very full reports which we are enabled to give, will enable our readers to follow us in our observations on them next week.

Notes on Current Topics.

THE NEW PHARMACOPŒIA OBLIGATORY.—We beg to draw the attention of our readers to the fact that the Medical Council has directed the necessary advertisements to be inserted in the London, Dublin, and Edinburgh *Gazettes* of Friday, June 14th, from which date all the formalities prescribed by Parliament having been complied with, the new Pharmacopœia of 1867 legally supersedes all other Pharmacopœias whatsoever, and its use becomes compulsory.

MEMORIAL TO THE HOME SECRETARY.—The Manchester Statistical Society, of which Mr. D. Chadwick, is the President, has memorialised the Home Secretary in reference to the Registration of Births and Deaths, and the appointment of Officers of Health. The memorialists, amongst other things, complain that there is no compulsory power to obtain a scientific record of the cause of death, and no security in the Registration Act, against fraudulent statements and the concealment of crimes of violence: That still-born children are not registered, and the omission has notoriously facilitated the burial of children as still-born, who have been born alive: That infanticide has greatly increased, and the grave too often conceals the evidence of secret poisoning: That there is no efficient check upon the district Registrars: That scientific medical assistance in Coroner's Courts is only sought where there is suspicion of foul play, and in ordinary cases the cause of death returned by the Coroner is necessarily inexact. They suggest the appointment of skilled officers of health, with a liberal salary, who would control the sanitary measures of the district, and might also assist the Coroner in certain particulars—become, in fact, *experts*, somewhat after the

manner proposed by Dr. Lankester, and noticed in our leading article a fortnight ago. The value of such appointments is incontestible, but the manner in which they should be made, though stated to demand careful investigation, is not considered in the memorial.

THE LONDON COLLEGE OF SURGEONS.—As we anticipated, Mr. Solby, of St. Thomas's Hospital, has been elected to the seat on the Board of Examiners vacated by Sir Wm. Lawrence. Some attempt at opposition was made, but proved quite ineffectual—the more so, we believe, since Mr. Solby has the character of a reformer; and so far, the members of the College may be congratulated on his success. Of his fitness for the post it would be superfluous to speak. He has been a teacher and Hospital Surgeon long enough to have rendered his merits known to the whole Profession. Considerable interest is exhibited in the other elections that will soon take place, and a sincere hope is generally expressed for the progress of reform in the College.

QUEEN'S COLLEGE, BIRMINGHAM.—This College was first established as a School of Medicine by several gentlemen of Birmingham, in 1828, and a hospital in connexion with it was built by public subscription in 1842. In the following year a Royal Charter was obtained, and the School changed into a College, under its present name. Large endowments were afterwards settled upon it by the late Dr. Warneford. A department in Arts, and another in Theology, were provided, and, by Royal Charter, at different times a corporate body was appointed and authorized to hold property for the support of both College and Hospital, and all proper regulations made for the government of the College, as well as the appointment of the Chaplain and the Medical and Surgical Staff. The Charity Commissioners found the College on the verge of bankruptcy, and applied to the Court of Chancery for a new scheme to be settled by the Master of the Rolls. Two of the trustees objected to this scheme, but the Lords Justices of Appeal approved of it, after two material alterations had been made by them.

THE CHOLERA CONFERENCE AT WEIMAR.—This conference seems to have been very successful. After fully discussing the spread of the disease, and the various modes of disinfection, the meeting proceeded to point out the direction in which further investigations should be made, and agreed that there should be—*(a.)* the relations of the lower animals to cholera; *(b.)* the influence of water, whether used for drinking or household purposes in extending the disease; *(c.)* the nature of soils, &c.; *(d.)* the influence of contact to determine whether cholera may be conveyed by goods, articles of dress, &c., from place to place; *(e.)* the effects of the epidemic influence; *(f.)* the spread of the disease by ships; *(g.)* the possible influence of merchandise in spreading the disease. The enumeration of these points deemed worthy of further research by the conference cannot fail to interest our readers.

THE RIVER LEA.—In consequence of the outbreak of cholera last summer in the East London District, this river was selected for early inspection by the Royal Commissioners on the pollution of rivers. From this source the half of London receives its supply of water, which was found to be polluted by the sewage of the different towns situate on the banks of the river, almost from its fountain-head, so that, by the time the stream had reached the metropolis, it had become filthy to an unknown degree. The Commissioners believe that no attempts hitherto made to cleanse it have succeeded. The following are their principal suggestions on this subject, which has a bearing so important upon the health of half this great city:—1st, The casting of sewage into the flowing water must be prohibited. 2nd, The question whether a navigation should be allowed to continue in a conduit for water destined for the supply of the metropolis is one which deserves serious consideration. 3rd, The appointment of a good working Conservancy Board, on which the Government should be represented as well as the water companies, the navigation and trading interests, and the city corporation. Lastly, They recommend that the companies be compelled to supply water upon the "constant system" throughout their districts.

DEATH FROM CHLOROFORM.—Dr. Lancaster held an inquest at University College Hospital on the body of a little girl named Florence Lennox, nine years of age. Her mother, the widow of a gardener near Oakham, Rutlandshire, brought her to the Hospital to have an operation performed for the cure of squinting. She was in perfect health at the time. Chloroform was administered by Mr. Gill previous to the operation, which was performed by Mr. Strethfield; and death took place upwards of two hours after. Dr. Sydney Ringer said he was present almost immediately after the chloroform was given. The patient was insensible and pulseless. She breathed heavily at intervals. He found, from post-mortem examination, that the body was well-nourished, that the heart was flaccid and contracted, but all the other organs healthy. He had no doubt the cause of death was syncope, from the administration of chloroform. It appeared that it was slowly and properly given—and not too much in quantity, and Dr. Ringer considered that there was some peculiarity of constitution in the case. They had used chloroform, he said, in that institution on thousands of patients, and had only met with one previous death about five years ago. The verdict of the jury was "Death under the administration of chloroform through misadventure." This case is of unusual interest in its bearing in the opinions of Caspar respecting slow poisoning by chloroform.

THE ELECTION OF COUNCIL OF THE ROYAL COLLEGE OF SURGEONS OF IRELAND.—On Monday last, being the first Monday in June, the College assembled to proceed to the election of a President, Vice-President, and Council, to serve for the ensuing year. Previously to the sudden and lamented death of Mr. Banon, the Vice-President, the programme which we foreshadowed in our last was that which it was anticipated would be adopted. That event, however, not only threw open the Presidential chair, but caused a further vacancy on the Council, which opportunity with that occurring from the retirement of Dr. Pentland, induced many candidates who had not previously announced their intention of offering themselves to do so. For the Presidency Mr. Adams and Mr. J. Hamilton competed, while for the Vice chair Mr. Porter offered himself. Mr. Macnamara also had laid his pretentions to the Vice chair before the electors, but subsequently withdrew from his candidature. For the two vacant seats on the Council the following nine gentlemen tendered themselves:—Mr. Butcher the outgoing President, Mr. Bigger, Dr. Darby of Bray, Mr. E. Hamilton of Stevens's Hospital, Dr.

Zachariah Johnson of Kilkenny, Dr. Kirkpatrick, Dr. E. D. Mapother, Professor of Anatomy and Physiology in the College, Mr. Shannon, and Dr. H. H. Stewart of Lucan. As may be presumed, the contest was a warm one, and the attendance of electors very large—100 votes having been recorded. At three o'clock, the College proceeded to a scrutiny of the ballot-box containing the votes for the Presidency, from which it appeared that Mr. Adams was elected by a large majority over Mr. Hamilton. Mr. Porter was chosen Vice-President, and Mr. Colles Secretary of the College without opposition. The scrutiny of the votes for Council occupied more than two hours, and resulted in the re-election of the out-going Councillors, with the addition of Mr. Butcher, the ex-president, and Mr. Mapother, in lieu of Mr. Adams and Dr. Pentland.

MEETING OF THE GENERAL MEDICAL COUNCIL OF EDUCATION AND REGISTRATION.

(Continued from page 535.)

Dr. Andrew Wood—I agree with what Mr. Syme has stated, that it will never do for this Council to take anything but an independent and a strong course in this matter. I have no hesitation in saying that we have great reason to complain that the Home Office (whether under the past or present Government) have not paid that attention to this Council which, from its position, it deserves. Nay, more, if I understand Mr. Walpole's communication, he endeavours to throw upon the Council the blame of the delay that has taken place, in consequence of our not adopting the clause which was sent to us by Sir George Grey. Did Mr. Walpole give us the least idea of that months ago when we waited upon him? Did he say to us, "The reason why I do not take up your Bill is because your clause is not satisfactory?" If he had told us that we should have known what to do. But we were put off from day to day without any reason being given; and now that the Act comes back, we are called upon to adopt a clause which, I have no hesitation in saying, virtually goes to unseat the Medical Council, and deprive it of the power of regulating the registration of the profession, making it co-ordinate, if not subordinate, to the Foreign, Home, and Colonial departments. I would rather have no Bill at all. I would throw the Bill over the table, and cast upon the Government the blame of allowing a state of things to continue, which inflicts a hardship, not upon the medical profession chiefly, but upon the public, who, if the Government will not take up this Bill, will still have men practising among them, who assume titles, implying that they are physicians or surgeons, and commit serious damage upon her Majesty's lieges. I believe it would be better to go to Lord Derby himself, and state exactly what has happened with regard to this matter, and state at the same time, that this Council cannot accept the proposal that has been made, and cannot undertake the duty sought to be imposed upon them by two Governments, of finding a private member to bring in a public Bill. I trust we shall now take our stand, and that whatever happens we shall stand well with the public and the profession, as having done our duty, let the Government excuse itself as it may.

Mr. Syme.—My motion is—"That the President be requested to intimate that the Medical Council cannot entertain the proposal which is contained in the last communication of Mr. Walpole, to the effect of authorizing one of her Majesty's Secretaries of State to insert the names of foreign practitioners in the Medical Register."

Mr. Cæsar Hawkins.—The differences of opinion that appear to exist with regard to the course we should take, show the absolute necessity of adopting Dr. Paget's proposal for a Committee. If you decide upon sending to Mr. Walpole (and he and Sir George Grey are the only persons with whom we have to do), the question will arise —"What will you do next?" And if you decide upon going to Mr. Hardy, the question will be—"What do you propose instead of this?"

Dr. Sharpey—I agree with Mr. Hawkins. I do not think that it would be a practical or useful course to go to Lord Derby, or any one else, simply saying—"We refuse the proposal." It would be better to appoint a committee.

Dr. A. Smith supported the motion for the appointment of a committee.

Dr. Alexander Wood—I strongly support the motion of Dr. Paget. I think that our reply will have much greater effect if it is calmly and deliberately considered and prepared by a Committee, than if it bears the least appearance of having been delivered in a fit of irritation and just indignation. I also remind the Council, that when there was a strong desire on the part of the Committee to draw up a schedule such as that suggested by the Home Office of foreign and colonial bodies fit to give licenses which should admit the holders upon our register, the difficulties were found to be insuperable. In the first place, it was difficult to get information with regard to these bodies; and in the second place, we found (I have some right to speak upon this subject from having been for several years your chairman in regard to the claims of foreign graduates) that in certain countries the whole arrangements of the Universities are so different from those in our own country that, although they are called by the same name, they mean very different things. In America, for instance, a university is not at all the same sort of institution that it is here. Any two or three individuals clubbing together for the purpose of forming a school are entitled by the laws to receive the *imprimatur* of the Government, and to be constituted a Government university. Then we often have a school labouring under that worst of diseases, "impecuniosity"—which it seeks to relieve by the granting of degrees with a freedom that is not at all reputable or safe. Now, looking at all these things—looking at the great care which it requires even on the part of medical men accustomed to look into these matters, to sift the evidence with regard to these qualifications—even with the assistance of the American Consul (who had never heard the names of many of these bodies before)—looking at the proclivities of Secretaries of State and other men in power to all kinds of heresies in medicine, I say we incur the greatest possible danger, to which we should be very foolish to expose ourselves, in going on with this Bill in the face of what I may call the warning which we have received. We are not delegates, but representatives from the different bodies; but I think we have perhaps a little erred in not taking the bodies that we represent sufficiently along with us in our struggles for medical reform. You cannot take up a single number of a medical journal which refers to the Medical Council without seeing that we are taunted with not having done things which the present Act renders it impossible for us to do. The utmost ignorance prevails among medical practitioners in regard to the powers which we possess under the Medical Act; and we are continually blamed for not exercising powers which the law has not given us. Now let us throw ourselves back upon the bodies we represent and the profession generally, who feel the necessity for the reforms for which we have been contending; and let us, before our next meeting, stir them up to besiege Parliament for a proper measure, that we may be able satisfactorily to administer. I think we should proceed calmly and deliberately, and not in the hasty manner proposed by Mr. Syme; I therefore support the motion of Dr. Paget.

Dr. Christison—I think there are very few who will not feel great surprise at the proposition that has been made by the Government. I am disposed to depart from my original view, and to support Mr. Syme's amendment, referring the matter to a Committee. To that Committee I would also beg to refer the motion which it was my intention to make, carrying into effect what has been particularly alluded to by every speaker in this matter—

namely, the more general question whether we ought ever to assent to a Bill being brought into Parliament for an amended Act, except by the Government. I feel that there is one sufficient reason why we should never do so, that we have no chance of carrying such a Bill, and under the present circumstances our chance is utterly hopeless. It is right that the Government should know this, and it is plain that they do not know it, otherwise such a proposition would never have been made to this body. It is now twenty-five years (in 1842) since a measure of medical reform, as it was then called, was taken up by Sir James Graham. It was repeated in 1845; and upon every occasion when an attempt has been made to bring in a Bill, it has been found that however private members might move in the matter, we were always obliged to give way, and to allow it to be brought in as a Government measure. Not only was this Act eventually carried by Government, but there have been no fewer than four amendments carried through Parliament, every one of which has been brought in by Government. Now what is to be concluded by the public and by legislators if they find that now, when we are coming for more important amendments than any hitherto proposed, the Government deserts us? How is it possible that we can expect to carry our Bill under such circumstances? I hope that the Committee will consider this question, which I have put in the form of a very moderate resolution—"That the Medical Act of 1858 was introduced into the House of Commons by the Government of the day; that the four amended Acts, which have since been carried, were introduced by Her Majesty's Government for the time being; and that this Council see insuperable objections to any attempt now being made to carrying new and most important amendments otherwise than by a Government Bill.

Mr. Hargrave said he considered that the Council had been completely "snubbed" by Mr. Walpole. He thought, however, that the Council ought not to think too lightly of the aid of private members, who on previous occasions had rendered great assistance. It would be much better for the Council to throw its pride overboard, and to apply to some honourable members of the House of Commons to assist them in the matter. They ought not to stand too much upon their dignity, or refuse such aid.

Sir D. J. Corrigan, Bart.—We are all, I think, unanimously of opinion that the course pursued towards us is one that ought not to have been pursued. I dissent altogether from Mr. Hargrave's proposition, and I think it would not be consistent either with our own dignity, or with our previous resolutions, or with the great interests involved in this question, to go hat in hand soliciting votes in the lobby of the House of Commons. Whatever amendment Bill is to be brought in, must be brought in by the Government; and if the Government do not choose to bring it in, let the evils that arise out of imperfect legislation lie at their doors. Last year we passed an unanimous resolution—"That it be delegated to the Executive Committee to confer with the Government in regard to the proposed Bill for the Amendment of the Medical Acts, to press on the Government the expediency of its being adopted as a Government measure; and, at the same time, to state that the Medical Council are of opinion that unless the Bill be introduced by the Government, it would be unadvisable to proceed with it." To that resolution I most strongly adhere. The question is a very narrow one, relating to a single clause from which we all dissent: that authority should be given to a Secretary of State to decide on a man's knowledge of midwifery or of medicine, is utterly absurd. We should be nothing but the mere registrars of the will and pleasure of the Secretary of State, who might any day send us down a declaration, that his nurse, or that some relative of his had informed him that Dr. Mary Walker was an exceedingly intelligent practitioner, and that he forthwith desired her name to be put upon the register. With regard to the proposal for a Committee, I shall give it my full support on one condition, namely, that the Committee shall consist of the whole Council, following the course we have pursued on two or three former occasions. I would offer as a suggestion for the Committee, following the example of Dr. Christison, the following resolution:—"That on consideration of the great interests involved in the question of medical reform, both to the public and the profession, the General Medical Council must adhere to their resolution of May 29, 1866, namely—that the Medical Council are of opinion that unless the Bill be introduced by Government it would be unadvisable to proceed with it; and that the General Medical Council must therefore decline to accede to the Right Hon. Mr. Walpole's suggestion, that the introduction of the amended Medical Bill should be confided to some independent member of the House of Commons."

Mr. Syme said he would withdraw his amendment, and consent to the appointment of a Committee.

Dr. Acland—I must express my dissent from what fell from Mr. Hargrave. I quite agree with what Sir D. Corrigan and others have said, that for us to bring in any amendment Bill after so many years of existence otherwise than through the Government, would be virtually altering our position, and taking a course which would be quite suicidal. I would rather remain for any reasonable time in fact, for any time—until we have by our own power and weight in the country obtained a proper Bill.

Dr. Quain said that by the proposed clause the British qualifiying bodies were put in a far worse position than the foreign bodies, who were proposed to be admitted by a simple application to a Secretary of State, and without any reference to the Privy Council. The answer to Mr. Walpole, and the question of the course to be subsequently adopted, should be kept distinct. He would propose, "That a Committee be appointed to prepare the draft of a reply to the letter which has been addressed to the President by Mr. Walpole, and that the Committee be requested to report to the Council to-morrow."

Mr. Syme seconded the proposal.

Mr. Rumsey thought that Dr. Quain's suggestion should be adopted, so as to keep the answer to Mr. Walpole distinct from the future course of proceeding. If the whole question was referred to the Committee, he feared that the answer of the Council would be greatly delayed.

Dr. Quain's amendment having been adopted by Dr. Paget, now became a substantive resolution, to which

Mr. Rumsey proposed as an amendment, and Sir D. J. Corrigan seconded, "That the Committee be not instructed to report on the amendment of the Medical Act."

Some further discussion having taken place as to the course to be pursued, the amendment was put and negatived by 13 against 6.

The motion was then carried *mem. con.*

The Committee was appointed, and consisted of Dr. Paget, Mr. Syme, Mr. Hawkins, Dr. Andrew Wood, Dr. Alexander Wood, Mr. Rumsey, Sir D. J. Corrigan, Dr. Christison, Dr. Acland, and Dr. Quain.

The Executive Committee.

A report was read from the Executive Committee, with reference to certain proposed Standing Orders having reference to the order of transaction of business remitted by the Council for its consideration.

The Report of the Committee on the proposed Standing Orders was as follows:—

"That the Committee, after full consideration of the subject, are of opinion that the adoption of these recommendations is unnecessary, as they give to the members of the Council no powers which they do not at present possess and exercise."

Dr. Alexander Wood said it was not intended by the proposed Standing Orders to give the Council any new powers, which could only be conferred by the Act of Parliament. He wished to state for what purpose he proposed those resolutions. When a Report was brought up before them it was read generally clause by clause, and imme-

diately every man amongst them who thought he was acquainted with English grammar would begin to criticise the grammatical composition of the clause. Then, having discharged themselves of that very important duty, they would proceed to discuss the order of the sentences, to see whether they were correctly arranged in a logical point of view; and at last, having got over the grammatical and logical trial, they proceed to consider the Report itself. The Report was then printed in the Minutes, and generally had to undergo a second process of grammatical and logical revision. Now he had introduced the proposed standing orders, with the explanation that they were neither intended to extend nor limit the powers of the Council, but to define them. Should the majority of the Council agree with the Executive Committee and throw the matter overboard, it would be competent for him to move that a Committee be appointed to consider how far the Standing Orders should embrace the dealing with Reports. At present he moved "That the Report of the Executive Committee be not adopted."

Sir Dominic Corrigan—I will move "That the Report of the Executive Committee be received and adopted."

Dr. Andrew Wood seconded the motion.

Dr. Alexander Wood moved, as an amendment, "That the Report of the Executive Committee be not adopted and that the resolutions be added to the Standing Orders."

Dr. Embleton thought such a set of Standing Orders was very much required. There was nothing like them in their existing Standing Orders; and if anything could show more clearly than another the necessity for such Orders, he thought it was the blundering method in which the business had been carried on during the last few minutes. He would second the amendment.

Mr. Paget thought that the suggestions of Dr. Alexander Wood were very good in themselves, but he was rather averse to making them Standing Orders, from which they could not deviate without the express permission of the Council.

Sir Dominic Corrigan said, whatever blundering the Council had exhibited in the management of public business the Chairman would be held responsible for. With regard to the first resolution, had any one ever doubted that it was fully competent for any member of the Council to move that a Report be or be not received? Then as to the next, who ever doubted the power of a member of the Council to move that a Report be recommitted? They might as well pass a resolution that any member of the Council be entitled to walk up stairs. The third resolution was not only unnecessary, but objectionable, because it would absolutely bind the Council to place the mover and seconder of the motion on the Committee, which might not always be desirable.

Dr. Stokes defended the Council from the charge that large portions of their time were occupied with grammatical disquisitions and questions of logic. As a member of the Council he repudiated any such statement.

The amendment was put and lost—3 voting for, and 14 against it.

Thursday, 30th May.

To-day the Council took into consideration the case of Mr. Forman, who was accused of having become registered through the instrumentality of a false affidavit, which asserted he was a member of the College of Surgeons.

Mr. Forman did not appear although he had been summoned, and, after hearing some evidence, the Council ordered his name to be erased from the Register.

Dr. Andrew Wood then proposed—

"That a Committee be appointed to consider and report upon what ought to be the new course of Professional Education to be gone through by all persons seeking entrance into the Medical Profession, in order to secure the possession by them of the requisite knowledge and skill for the efficient practice of their profession."

He said the same amount of attention had not been paid to professional as to preliminary examination, and he thought it was one of the functions possessed by the Medical College to determine what standard they should erect, which would qualify students who presented themselves for examination to be placed upon the register. Much uncertainty at present existed amongst the licensing bodies, as to what was the precise curriculum of study enjoined, and this uncertainty, he thought, had created, and was likely to create, so long as no uniform system existed, much embarrassment, both to the student and the licensing bodies generally, and he maintained that if the Council appointed a Committee to sketch out the subjects on which each student would be required to be examined, he would know beforehand exactly what would be required of him before he commenced his studies. The Council would then be in a position to determine upon one uniform system of education to be adopted by all the recognised medical schools.

In seconding the resolution of Dr. Wood,

Dr. Parkes hoped the Council would not waste their time by a discussion upon the question of one uniform system, as he considered the mover had made out a sufficiently good case, that the advantages must be patent to all.

Dr Storrar said, Dr. Wood and Dr. Parkes had made their speeches as short as possible, evidently desiring there should be but little discussion on the motion then before the Council; he (Dr. Storrar), however, begged to differ from those gentleman, and hoped the Council would allow him to state his views, and the results of his experience on the questions at issue. He was well aware that there existed many and diverse opinions among the licensing bodies. Some would limit the number of courses requisite for study, others doubted the utility of any particular curriculum; another body insisted that the study of one or two important subjects, would fit a man for the practice of his profession in after life. Again, some of the schools commenced their session in October, others in November, whilst a few thought the term should open with a summer session. Then, there were tedious discussions about long and short courses, so that it became impossible to adopt one uniform system. Even supposing it were possible, he very much doubted its desirability. At first sight, there was something so tempting in the idea of uniformity, that it almost seduced one to believe everything in the way of education could be reduced to this system. For the last three years, he had given great attention to the subject of education, and from information gathered throughout the United Kingdom, combined with that officially obtained from a Special Commissioner sent to the Continent, for the purpose of getting the views there entertained, he believed that the Council would make a great mistake if they introduced a uniform system of education. In France, where it was most perfect, so perfect in fact, that it moved like a machine throughout the country, and where the Chief of the Department could at any time look at his watch, and say he knew what lectures were at that hour being delivered over the whole Empire—it was a signal failure, on account of the perfection of the system. In the present curriculum, the Council had the master-piece of medical education—the preliminary examination in Arts; then there was the four hours of prescribed studies—the visitations of examinations, with power of improving them, &c. But to require that every man should attend so long at Hospital practice, give so much time to bandaging, midwifery, and other subjects, whether he would ever require them or not, he thought was a great mistake. Opinions on the training of minds for professional pursuits were so diverse, that he sincerely hoped the Council would not think of passing the measure before them.

Sir Dominic Corrigan would vote for the motion of Dr. Wood, if he would agree to omit the words "professional study," because, in many branches of study, such as midwifery, it would be utterly impossible to draw up any prescribed rules. He knew that in many Colleges, irregularities as to time of study, attendance at lectures, examinations, granting certificates, &c., already existed, and he thought

if this uniform system of professional study were adopted, a much larger field would be open for these proceedings.

Dr. Alexander Wood remarked that Sir Dominic Corrigan's usual mode at that Council was to erect a man of straw, in order that he might have it to knock down. He seemed to persist in opposition, so that he had little hope of bringing forward any measure with an idea of success, when such determined opposition to progress was made. He was glad to see the Council did not all entertain the same views as Sir Dominic, and he thought that if such obstructions were to be continually thrown in the way, it was useless to proceed.

Mr. Hargrave said the working of the machinery of education, as at present adopted in the schools of Dublin, was eminently satisfactory; but he thought if something more were determined upon, in the character of the examinations, it would be a great boon.

Mr. Cæsar Hawkins thought it would simplify matters if the words "and examinations" were omitted in the motion.

Dr. Andrew Wood had no objection to this course.

Dr. Sharpey was sorry that the wish to pass such an iron rule upon students should ever have been entertained by any member of the Council. He thought the proposal carried its own defeat.

Mr. Paget suggested that a committee should be appointed to consider the question of professional study. He thought it would be a very unwise measure to compel every student to go through one and the same course of study.

Dr. Acland was impressed with the same ideas. He quite agreed that there should be a minimum standard of education; for a student who could not perform the simple operation of cupping a patient, would certainly not be fitted for the higher branches of his profession. He thought it would greatly expedite matters if committees were appointed to report to the Council the curricula on three subjects, so that the Council might be able, by collective wisdom, to decide upon the minimum standard to be adopted.

Mr. Rumsey strongly objected to one uniform system of education for the reasons already stated, and for others which he entertained, but he quite agreed that there should be a minimum standard of education. The enforcement of the measure proposed would be most unphilosophical.

Dr. Risdon Bennett said the difference existing in his mind, between a fixed and a minimum standard of education, was very great. He did not see why a student for the College of Physicians should be compelled to go through the same course—to devote the same time to the study of surgery and pharmacy, before he could go up to the Examining Board as a student for the College of Surgeons. He thought it would be foolishness, in the extreme, to lay down any fixed course of study.

After some further remarks by Sir D. Corrigan, Dr. Christison, Mr. Rumsey, Dr. Wood, and Dr. Acland, the discussion was adjourned to the next day.

Friday, 31st May.

Dr. Risdon Bennett resumed the discussion on Sir Dominic Corrigan's amendment, adjourned from the preceding day, proposing as a substitution to that of Sir Dominic Corrigan:—

"That the Council having decided what should be the extent and character of the Preliminary Examination, it is incumbent upon them to consider and report on the amount and character of professional study absolutely necessary for securing the possession of the requisite skill and knowledge by all persons seeking entrance into the medical profession, and that a Committee be appointed for that purpose."

After discussion, in which Mr. Syme, Dr. Alex. Wood, Sir D. Corrigan, Dr. Fleming, Mr. Rumsey, and Dr. Andrew Wood took part, the amendment was lost.

The amendment of Sir D. Corrigan was also put from the chair, and negatived,

When Dr. Quain proposed a second amendment seconded by Mr. Syme:—

"That a Committee be appointed to consider and report to this Council what are the subjects, without a knowledge of which no candidate should be allowed to obtain a qualification entitling him to be registered."

Which, having been carried, was put as a substantive to the original motion of Dr. Wood, and agreed to. The Committee to consist of the following members:—Dr. Quain, chairman; Dr. Bennett; Mr. Hawkins; Dr. Storrar; Dr. Andrew Wood; Mr. Syme; Mr. Hargrave; Dr. Sharpey; and Dr. Stokes.

It was then moved by Mr. Hawkins, seconded by Dr. Paget, and agreed to:—

"That the reports of the visitors of examinations be received and entered on the minutes, and that a copy be sent to each of the bodies named in Schedule (A) to the Medical Act."

Dr. Andrew Wood then rose, pursuant to notice, to propose the following motion:—

"That the reports of the visitations of examinations during the past two years, be referred to a Committee, whose duty it shall be to go carefully through them, and to bring before the General Medical Council, during their present Session, a report embodying such recommendations, founded on the various suggestions made by the visitors, as may tend to improve generally the examinations for the licence to practise medicine and surgery, and to remedy the defects in particular examinations which have been pointed out by the visitors."

Dr. Wood said he would not detain the Council with any lengthy remarks on the motion he had brought before them, as he thought there could not possibly be any great opposition to the measure proposed. They had seen and heard a great deal of evidence on the subject, and comment on that evidence had been very freely indulged in. But, looking at the encouragement the Council had received from the visitations, and the evidence before them, the motion, he anticipated, would be adopted by a large majority.

Dr. Storrar begged to second the motion.

Mr. Hawkins thought it a very praiseworthy measure, and one which must eventually be adopted, but he doubted the desirability of its being passed in the present session of the Council. It was of so much importance, that they should not be hasty in dealing with the matter, and he hoped the Council would hesitate before sanctioning its adoption.

Dr. Parkes was of a different opinion. He thought the Council should not hesitate to appoint a Committee for the immediate consideration of the motion; nothing could possibly be gained by delay, whilst much valuable time might be lost.

Dr. Stokes and Mr. Hargrave were of the same opinion.

The motion was then put and agreed to—the Committee consisting as follows:—Dr. Andrew Wood, chairman; Mr. Hawkins; Dr. Paget; Dr. Storrar; Dr. Thomson; Dr. Leet; Dr. Apjohn; Dr. Sharpey; Dr. Parkes; and Dr. Christison.

Dr. Paget considered the reports, as presented, were so good, from all three divisions of the United Kingdom, that no apology for them was necessary. There were but two exceptions to make them complete, viz.—the University of St. Andrews, and the Apothecaries' Hall of Ireland, and he proposed, that in order that the Council should be in possession of these reports, two Commissioners should be delegated to visit the examinations of these bodies, and furnish reports therefrom, as the reports without them were necessarily incomplete. He then proposed:—

"That it be an instruction to the Committee to report as to the best means of supplying the few omissions in the reports of visitations of examinations *now* received."

This motion was seconded by Dr. Thomson, and carried.

Dr. Acquilla Smith, addressing the President, wished,

with his permission, to make a few remarks on a subject which, he thought, every member of the Board would condemn. On May 25th, four days before the meeting of the Council, an article appeared in the *British Medical Journal*, commenting on one of the reports which were printed for private distribution amongst the members only, and upon the title-page of which appeared the word "confidential." He would not stop to enquire how this report got into the hands of those connected with the journal in question. It was much to be regretted that the conductors of a journal should have committed such a gross breach of confidence as to ignore the respect due to the Council, by commenting upon matters prior to their being officially brought before the members of that Board. He (Dr. Smith) hoped the President would take some notice of this breach of confidence, so that the Council, through him, might express their condemnation of so unwarrantable a proceeding.

The PRESIDENT said Dr. Smith was perfectly justified in bringing the subject before them, and he was convinced the members of the Council concurred in the remarks that had been made. It was a great breach of confidence on the part of those who conducted the journal in question; and he wished to express his entire disapproval of the unusual course that had been adopted. If the Council agreed with the remarks that had fallen from Dr. Smith and himself, he would request the Registrar to place a notice of the same upon the minutes.

This proposal having been assented to, the Registrar was requested to place the same upon the minutes of the Council.

Dr. ALEXANDER WOOD then gave notice that, with the permission of the Council, he would withdraw his motion inserted upon the programme of proceedings, which was:—

"That, with the experience the Council have had during the last two years in conducting the Visitation of Examinations personally by members of the Council, it is desirable that the expediency of the alternative method provided in the Act be now considered.

"That with this view, the Council do, during the present Session, reconsider the report of a Committee on 'Visitation of Examinations,' laid before the Council 21st June, 1860, and printed in the Minutes, vol. i., pp. 125-6."

And would substitute the following:—

"That a Committee be appointed to prepare a scheme for the Visitation of Examinations of next year, and especially to consider the best means of supervising the Arts' examinations."

Dr. Wood said he knew the present proposition would meet with the same obstructions that had been before advanced when this subject had been brought forward, and in the course of an elaborate speech, severely censured those members who had hitherto refused to act at the Visitations of Examinations. He declared that whereas one or two had declined to do their duty—a duty, moreover, which he considered was incumbent upon them, though not compulsory, by the Act of Parliament he cited—another member (Dr. Smith) was afraid to act because the College (the College of Physicians of Ireland), for which he was the accredited representative, refused its sanction, on pain of dismissal from continuing to be a member of their Council.

To this personal attack, Dr. SMITH rose to give the statement the most unqualified denial, declaring that the remarks of Dr. Wood were simply and essentially untrue in every particular.

Dr. WOOD concluded his remarks by stating that so long as individual members of that Board refused to perform what he considered to be their duty in this important matter, it being imperative that it should be performed by some one, nothing satisfactory could possibly ensue. He maintained that, as different Bodies conducted the Examinations in different ways, there must necessarily be two ways of doing them—one right, the other wrong. The question before the Council was, which was the right one. Let them, then, thoroughly examine the matter as it stood—let the Committee prepare the scheme, and then they would know what they were about, and not be pulling one against the other, or, like Tony Lumpkins, be trotting round and round a circumscribed area, without daring to go manfully and resolutely at the point.

Sir DOMINIC CORRIGAN rose and said that a member of Council had yesterday observed that there was great blundering in the mode of carrying on the business of the Council. He was sorry to be obliged to-day to endorse that observation. One of the causes of the long and desultory discussion arose from what he could not avoid saying was a most irregular proceeding—viz., Dr. Alexander Wood being allowed to withdraw his notice of motion on paper, and substitute for it a motion of a totally different character, and altogether unconnected with it in substance. He must, before going into discussion on the question now before them, notice the very unwarrantable attack of Dr. Wood on the President and Fellows of the King and Queen's College of Ireland, when he said that no man in his senses could believe that in the letter written by that College, the Fellows of the College stated the truth as to their reasons, and that it was obvious what was stated by them was merely a pretence to conceal their true reasons and motives. The Fellows of the College of Physicians of Ireland were equally indifferent to his praise and his censure, and they would regard both with equal contempt. Dr. Alexander Wood had found fault with him in having always refused to take any part in the Visitation of Examinations, and had, moreover, charged it as an aggravation that while he (Sir Dominic) had persistently refused to take any part in the visitation of examinations, he had never condescended to explain his reasons to the Council. He hoped that, on merely calling to the recollection of the Council what had occurred, Dr. Wood would himself remember that when he was first asked to take part in the visitation of examinations, he felt it necessary to explain his reasons and he did give his reasons at great length, and as these reasons were already stated in the published reports of their debates, he would not occupy the meeting with a repetition of them further than to repeat one observation he had then made—that in principle the system was rotten of A. inspecting the examination conducted by B., and of B. conducting the examination by A., and then A. and B. interchanging their reports on each other. He had spoken in his former observation of the visitation of examinations as a farce. He must, he regretted to say, go further, and say that he now considered it as a cheat and a blind on the profession and the public. These facts came before them in the proceedings of yesterday that the College of Physicians of Edinburgh had two doors to its hall of examination—one at which candidates were admitted on public days, and paraded as show-girls are paraded at boarding-schools on their public days for the admiration of visitors—days on which the visitors appointed by the Council are notified to attend, but another door for what are called by Dr. Wood "exceptional" cases, for examinations to which the visitors have never been summoned, and conducted in private at a different hour—at six o'clock in the evening,—and that the candidate for this private examination pays double fees. Thus the candidate who fears to enter the front door when the visitors of examinations may be present, is desired to wait behind the second door and told that when eyes that might be troublesome are away he could then slip in and get his examination in strict privacy and his diploma, provided he only paid a double fee. With such a system as this, surely he was justified in the view he entertained that the visitation of examinations is a cheat and a blind. He (Sir Dominic) did not know sufficiently the regulation of the College of Physicians of England to speak of them, but in regard to the College of Physicians in Ireland he must set Dr. Wood right. There are special examinations, but here all resemblance ceases. There is no double fee paid for the examinations at the College of Physicians in Ireland, making it their interest

to have as many as possible of those private examinations. There is no privacy. In Dublin alone there are of Fellows and Licentiates about 150 or 200, exclusive of those attached to the garrison. The College is always open, with its library and reading-room. The notices of every examination are posted in the Entrance Hall. The examinations are open to all Fellows and Licentiates—the President presides. There is in this public examination the true, and, he believed, best safeguard for a good examination, and for a true verdict. He (Sir Dominic) could now understand the very prominent opposition presented by Dr. Alexander Wood, to the proposition discussed on a former occasion, of having examinations public, as they are conducted in the University of Dublin, in the Royal College of Surgeons Ireland, and in the King and Queen's College of Physicians Ireland. Publicity would spoil a system of double fees and partial examinations. He would now condense his grounds of objection to Dr. Alexander Wood's motion into these short observations —that it was a substitution for the motion on paper of another having no relation to it; that it came upon the Council by a surprise; and that, by a side wind, it virtually repeated, without any previous notice, a resolution in the minutes, that the Branch Councils were the bodies to carry out those visitations. All these were reasons, in addition to the views which he had always taken, that a system that in principles was bad, can never be made right in details. He would now conclude, by merely drawing the attention of the Council to the fact, that while Dr. Andrew Wood was very severe on the Branch Council of Ireland, for having omitted to visit the examination at the Apothecaries' Hall of Ireland, the Branch Council of Scotland, (of which fact, of course, he took no notice), were in a worse predicament, for there was no report from it of any visitation to the examination of the College of Physicians of Edinburgh, or of the University of St. Andrews.

Mr. Rumsey regretted exceedingly, that such unmeasured language should have been used. He was one of those members who had refused to act, for reasons well known to the Council. He maintained there was no legal compulsion contemplated in the Act which Dr. Alexander Wood had quoted; and one reason for his declining to act was, because of the existence of an alternative, which alternative he should firmly adhere to, until the visitations were more thoroughly conducted. He considered the visitations should be undertaken by persons not belonging to the Council, and that visitors, inspectors, or examiners, as they might be termed, should be appointed, similar to those at the Government Educational Establishments, who should be constantly at work—without partiality or injudicious opposition. Until this were done, no permanent good could possibly be arrived at, and no satisfactory objects attained by the visitations so strenuously and persistently upheld by Dr. Alex. Wood.

Dr. Wood explained that he did not mean to infer there was any compulsion in the Act quoted by him, it was merely, in his opinion, a matter of duty. He much regretted Mr. Rumsey had refused to accept only part of his explanation relative to those members who had declined to act in the visitations. Sir Dominic Corrigan had also, in his most vehement speech, taken the Universities of Edinburgh to task, in his usual ingenious manner. These bodies seemed to the hon. baronet, a stronghold for every attack, and a point for every joke, in the arguments which he continually brought to bear on the subject. To this speech, however, he would be sorry to reply, as it might again lead to personalities and retorts, which would be anything but agreeable or entertaining.

Dr. Parkes observed, that as he heard no tangible objections advanced against the substitution of the present for the original motion of Dr. Wood, he considered the same to be practically unopposed. He would, therefore, in seconding the resolution, suggest the appointment of the Committee.

The resolution having been put and carried,

It was moved by Dr. Embleton, seconded by Dr. Storrar, and agreed to—

"That a Committee be appointed to report upon—1. The Registration of Medical Students. 2. The returns from the bodies in Schedule (A) of professional examinations and their results."

The Committee were nominated—and the proceedings adjourned till Saturday.

Saturday, 1st June.

On this day the sittings of the Council commenced one hour earlier than usual, but little business was got through, an hour and a-half being consumed in the discussion of points relating to the etiquette of the Council Table, upon invidious remarks and personalities, which it would be idle for us to chronicle, and worse than useless to our readers. We give the business transacted in full; refraining from introducing any of the speeches or remarks that were made during its process, as they were merely of a desultory character, and would occupy more space than we are able or think it essential to give :—

It was then proposed, "That it would expedite the business of the General Medical Council, and tend to shorten the length of its Sessions, were the Council to adopt Resolutions to the following effect, viz :—

'1. That the Executive Committee should consider and prepare Reports upon any subjects that may suggest themselves to the Committee, as requiring the attention of the General Council.

'2. That such Reports should be printed and circulated among the members of the General Council, at least one fortnight before its meeting.

'3. That the Branch Councils be requested to transmit to the Executive Committee the Reports of the Visitation of Examinations, at least one month before the meeting of the General Council, in order that they may be printed, and circulated among the members of the Council.

'4. That the Executive Committee meet before the annual Meeting of the General Council, in order to prepare and arrange the business for the consideration of the Council.'"

Reports from each of the Branch Councils were then read to the effect—

"That it is not necessary to define more clearly the manner in which the column headed 'Place of Medical Study' in the form of registration of medical students should be filled up."

The following communications addressed to the Medical Council were on the programme of business for this day, but were postponed till Monday:—

"From the University of Melbourne, University of Calcutta, and University of Sydney, praying for the recognition of its degrees.

"From the McGill University, Montreal, praying for the recognition of its Matriculation Examination.

"From the Registrar of the Medical Council of Upper Canada, praying for the Registration of Upper Canadian Diplomas.

"From the President of the Medical Council of Upper Canada, relative to the recognition of certain Colonial Diplomas.

"From Dr. George Buchanan, Examiner in Arts to the Society of Apothecaries, relative to compulsory Examination in Greek.

"From Dr. W. B. Hepworth, relative to the Medical Acts Amendment Bill.

"From the Cork Medical Protection Association, ditto.

"From Dr. James Mason, ditto.

"From Dr. Gibson, relative to the Qualification of Master in Surgery.

"Petition from Henry B. C. Millier, for the Registration of his Erlangen Degree, obtained without regular Examination.

"Petition from Richard Organ, to be allowed to pre-

sent himself for Examination at one of the Examining Bodies."

"Communications from the President of the Council of the British Medical Association to the President of the Medical Council, relative to the Medical Acts Amendment Bill."

Sir Dominic Corrigan proposed, and Dr. Paget seconded—"That the letter, with enclosure, from the President of the Council of the British Medical Association be inserted on the minutes."

The following notice of motion, by Dr. Paget—"That the Communications from the Universities of Melbourne, Calcutta, and Sydney, and from the Registrar and President of the Medical Council of Upper Canada; also those from Dr. W. B. Hepworth, the Cork Medical Protection Association, and Dr. James Mason and the President of the Council of the British Association, be read," was also postponed, and the meeting adjourned till Monday.

Correspondence.

REMOVAL OF THE ARM AT THE SHOULDER-JOINT, AT SEA.

TO THE EDITOR OF THE MEDICAL PRESS AND CIRCULAR.

Sir,—On the 1st of May, 1830, after the action between H.M. brig, *Primrose*, and the Spanish slave frigate *La Velos Passagera*, I had to perform seventeen capital operations; five above and three below the knee; six above and two below the elbow; and one at the shoulder-joint. I had no Assistant-Surgeon, but I got the purser to assist me. I performed all the operations in one day, except the shoulder. I found the arm dreadfully shattered. He was in a boat on the booms, and the ship was going about eight knots; wind abaft the beam. I rolled some calico round the handle of the key of my cabin-door, and instructed the purser in its use. In cutting through the deltoid, I cut through an irregular artery, which I had to tie. When I had finished my sweep round the limb, I found the main artery untouched. I tied it at once, and relieved both the purser's anxiety and my own. I now detached the deltoid, cut the ligament, and separated the limb. I brought the edges together by stitches and plaister as well as I could, and placed a wet cloth over it. It gave me no trouble; healed rapidly. When I hear so much fuss, and so many assistants required, at such operations at public hospitals, I cannot help thinking what a fix some of them would have been in had they been in my situation—though, to be candid, I did not like it; but I had to do it, and did not lose a patient.—I am, sir, your obedient servant,

Alexander Lane, M.D.,
Surgeon Royal Navy.

TREATMENT OF AGUE BY HEAT TO THE SPINE.

TO THE EDITOR OF THE MEDICAL PRESS AND CIRCULAR.

Sir,—As many valuable and scientific articles appear from time to time in your journal on the use of cold in spinal ice-bags, permit me to give you some information on the application of heat.

Thirteen years since I was quartered at a most unhealthy station in the East, where Europeans and natives suffered fearfully from jungle fever, in the shape of quotidian ague. I became a victim also, treating myself according to the orthodox medical principles without benefiting thereby, as I could not leave my station. Reduced almost to a skeleton, my devoted native head servant took compassion on me, and said "if master would try native doctor's remedies, he soon get well," I submitted cheerfully, as it was simple. When the sun set, the cold creeping sensation of the disease regularly commenced, well-known to those who were attacked, that peculiar feeling along the course of the spinal column, and the blue marks at the root of the nails. My servant heated two common bricks, wrapped them up in several folds of cotton cloth, and applied them to the spinal-cord as I reclined in bed; the cold stage even on first application was rapidly cut short, and the warmed stage induced with intense relief to myself. He continued the treatment for a week every evening, when I had entirely got rid of my enemy. Without taking up your valuable space, I merely state this as a fact, which I subsequently confirmed by treating others in the same way The hot bricks are rude I grant, but efficacious. It appears to be an old native remedy. Why should not hot spinal bags be used in such diseases. One of the native doctors told me that he used this hot treatment in cholera by means of braziers of hot fire, *i.e.*, live charcoal, put under the bamboo couch on which his cholera patients were laid naked, then covered over above, except the face, with thick warm clothing. The intense cramp and suffering of this unknown malady was checked remarkably with cessation of rice-water evacuations and vomiting, and the relief was invariably followed by copious offensive discharges from the bowels the next day. As this knowledge may be generally unknown, I offer it as having witnessed facts, and am a firm believer in the hot treatment of ague or cholera.—Yours respectfully,

M.D., M.R.C.P., Lond.

Medical News.

Royal College of Surgeons of England.—An advertisement appeared in the *London Gazette* of Friday, to the effect that a meeting of the Royal College of Surgeons will be held at the Hall of that Institution on Thursday, July 4, at 2 o'clock, for the election of three Fellows into the Council of the College, in the room of Mr. Frederic Carpenter Skey, of Mr. Thomas Wormald, and of Mr. Francis Kiernan, who go out in rotation, but are eligible for re-election. It is understood that these gentlemen will again offer themselves for the honour of a councillor's seat, but will meet with some opposition, as already Messrs. Holden and Spencer Smith's friends have expressed their intention of bringing these gentlemen forward.

Her Majesty the Queen has decided upon expending no less a sum than half-a-million sterling on the erection and endowment of an Asylum for Convalescents, in connection with the several Metropolitan Hospitals—more especially with St. Bartholomew's, of which the Prince of Wales is President. It is reported that about £200,000 is to be appropriated to the purchase of a site, and the erection of suitable buildings in a healthy part of the country; the remainder to the endowment. The *Standard* of Monday last confirms the report in the following terms:—"The rumour of her Majesty's intention to erect and endow a hospital in the country as a convalescent hospital, in connection with the Royal foundation of St. Bartholomew's, is quite correct, the Governors having received an intimation of the Queen's Royal pleasure through the President of the Hospital, his Royal Highness the Prince of Wales, a few days ago."

List of Entries in the Branch Medical Council, Ireland, for May, 1867.

Arthur Ormsby Wiley, 14, Longford-terrace, Monkstown, County Dublin, L.R.C.S., Ireland, 1867.

John Riddell, Shantonagh, Ballybay, County Monaghan, L.R.C.P. Edin., 1866; L.R.C.S. Edin., 1866.

James Henry Ussher, Elmville, Roundtown, County Dublin, M.B. Univ. Dublin, 1866; Mastr. Surg. do., 1867.

Joseph Thomas Begge, 4, Cavendish-row, Dublin, L.K.Q. Coll. Phys. Ireland, 1866; Lic. Royal Coll. Surg. Ireland, 1866.

Charles George Lyster, Cascade House, Freshford, County Kilkenny, Lic. 1867, and Lic. Midwif. 1867; K.Q.C. Phys. Ireland; Lic. Royal Coll. Surg. Ireland, 1867.

John Ferguson, Summerhill, County Meath, Lic. Fac. Phys. Surg. Glasgow, 1864; Lic. Royal Coll. Phys. Edin., 1865.

John M'Gee M'Cormac, Ballinahinch, County Down, Lic. Royal Coll. Phys. Edin, 1867; Lic. Royal Coll. Surg. Edin., 1867.

Daniel Heagerty, Passage, West, Cork, Lic. Royal Coll. Phys. Edin., 1867; Lic. Royal Coll. Surg. Edin., 1867.

Royal Zoological Society of Ireland.—The Council of the Society have added to their collection, within the last week, a fine Bonnet Monkey, presented to the Society by G. Graves, Esq., 11, Tivoli-terrace, Kingstown. The animal is in perfect health, and has been placed in one of the cages of the new monkey house. The pair of pelicans lately introduced into the gardens, have been pinioned and let loose upon the lake, where, it is hoped, that they will breed. They have become familiar, so that they will come to the call of their attendant. They have returned to their original habits, and have been seen to dive to the bottom and bring up live fish in the great pouch which is attached to their lower mandible.

The latest news from India states that cholera had prevailed seriously in Benares during the pilgrimage there; and that the disease had, in spite of precautions, also appeared among the masses of natives who had crowded to the fair at Rendwar.

THE BRITON MEDICAL AND GENERAL LIFE ASSOCIATION.—We avail ourselves of the occasion of the Annual Meeting of the Royal Medical Benevolent Fund Society of Ireland to remind our readers that, however prosperous that noble institution may be, it can never afford any but an auxiliary provision to that which it is the duty of every man to make for his family. The Briton claims the support of medical men on the ground that it is under the administration, to a great extent, of medical men, its Directory including such men as Fergusson, Partridge, Tyler Smith, Propert, and Sieveking.

NOTICES TO CORRESPONDENTS.

Dr. Peebles.—Your paper has been received, and we hope it will appear in our next.

We have received your letter in reply to Mr. Thompson. In the crowded state of our columns we cannot find room for further discussion on the subject, to which so much space has already been given.

Mr. Smith.—Received, and will shortly appear.

Mr. W. U.—Sorry we were unable to insert your remarks in our last issue.

ERRATUM.

Page 481. Line 3. In Mr. Adams' Lecture on Stone, for visible read "friable."

BOOKS, &c., RECEIVED.

On Diseases of the Lungs and Air Passages. By Henry William Fuller, M.D., Cantab. London: John Churchill and Sons.

On the Treatment of Consumption. By Charles Tomason Thompson, M.D. London: Robert Hardwicke.

Guide for using Medical Batteries in the Treatment of Nervous Diseases. By Alfred C. Garratt, M.D. Philadelphia: Lindsay and Blakiston.

On a Constant Supply of Water for London. By J. F. Bateman, F.R.S., Thomas Beggs, and Wm. Rendle, Esqs.

The Glasgow Medical Journal.

The Laboratory.

Hardwicke's Science Gossip.

The Pharmaceutical Journal for June.

The Sewage Question. By Fred. Charles Krepp. London: Longmans, Green & Co.

MEDICAL DIARY OF THE WEEK.

THURSDAY, MAY 30.

ROYAL INSTITUTION—3 P.M., Prof. Huxley, "On Ethnology."

FRIDAY, MAY 31.

ROYAL INSTITUTION—8 P.M., Mr. J. Ruskin, "On the Present State of Modern Art."

SATURDAY, JUNE 1.

ROYAL INSTITUTION—3 P.M., Prof. Huxley, "On Ethnology."

Births, Marriages, and Deaths.

Announcements are inserted without charge, and must in all cases be authenticated with the signature of the sender.

BIRTHS.

AINSWORTH.—On the 26th ult., at West-grove, St. Lawrence, Jersey, the wife of Samuel Ainsworth, Esq., of a daughter.

BASTIAN.—On the 24th ult., at Avenue-road, Regent's-park, the wife of Dr. H. C. Bastian, of a daughter.

BRUMWELL.—On the 28th ult., at Mossley, near Manchester, the wife of G. M. Brumwell, M.D., of a daughter.

JACOB.—On the 31st ult., at Ely-place, Dublin, the wife of Archibald Hamilton Jacob, M.D., F.R.C.S., of a son.

JAMES.—On the 24th ult., at Perry-vale, Forest-hill, the wife of A. James, M.D., of a daughter.

LONGMORE.—On the 24th ult., at Hamble, Southampton, the wife of Deputy-Inspector General Longmore, C.B., of a daughter.

SAUNDERS.—On the 21st ult., at the Devon County Asylum, Exminster, the wife of Dr. G. Symes Saunders, of a son.

WARD.—On the 21st ult., at Bicton-terrace, Exmouth, the wife of T. M. Ward, M.R.C.S.E., L.S.A., of a daughter.

WATKINS.—On the 26th ult., at Guilford-street, Russell-square, the wife of Edwin T. Watkins, M.D., of a son.

MARRIAGES.

HAMILTON—JEFFRAY.—On the 29th ult., at St. Mary's, Windermere, Archibald Hamilton, M.D., of Windermere, to Katharine, only daughter of the late Rev. L. W. Jeffray, M.A., Rector of Aldford, Cheshire.

POPE—NORTHCOTE.—On the 29th ult., at St. Mark's Church, Sturbiton, Edmund Pope, Esq., Surgeon, of Stepney-green, London, to Ellen Northcote, stepdaughter of E. W. Barfoot, Esq., Surgeon, of Cadogan-road, Surbiton.

DEATHS.

MOLLE.—On the 18th ult., at Soden, near Frankfort-on-Main, John W. Molle, M.D., of Charleston, U.S., aged 35.

RUMSEY.—On the 13th of April, at Buenos Ayres, John Henry Rumsey, M.R.C.S., eldest and beloved son of Arthur Rumsey, Esq., of Fulham-road, London, aged 27.

SOMERVILLE.—On the 21st ult., at Acle Villa, Croydon, Surrey, Thomas Hope, eldest son of David Hope Somerville, M.D.

WARD.—On the 22nd ult., at Bicton-place, Exmouth, John Richard Ward, M.R.C.S.E., formerly Battalion Surgeon Scots Fusilier Guards, aged 87.

WILTON.—On the 23rd ult., J. W. Wilton, F.R.C.S.E., of Gloucester, late Senior Surgeon to the Gloucester Infirmary, aged 71.

NOTICE TO ADVERTISERS.

The Medical Press and Circular

OFFERS UNUSUAL ADVANTAGES

FOR the Insertion of announcements from its extensive and largely increasing circulation in each of the three divisions of the United Kingdom and the Colonies. Being also supplied to the Hospital Libraries, &c., it will be found a most valuable medium for Advertisements of Books, Vacancies and Appointments, Sales, and Transfers of Practices, Surgical Instruments, Chemicals, and Trades generally.

The scale of charges is as follows:—

Seven lines and under	£0	3s.	6d.
Per line afterwards	0	0s.	6d.
One-quarter page	1	0s.	0d.
Half ,,	1	15s.	0d.
One ,,	3	0s.	0d.

The average of words per line is twelve.

When advertisements are given for a series of insertions, a very considerable reduction from the above scale is made.

☞ Advertisements for Insertion in this Journal must be at the OFFICE, 3, LINCOLN-PLACE, DUBLIN, on MONDAY, by THREE o'Clock.

COD LIVER OLEINE
FOR HOSPITAL USE.

BEDFORD BROTHERS, believing that a pure, good and Cheap Cod Liver Oil is one of the great necessities of Hospital practice of the present day, have arranged to supply the demand in the form of a COD LIVER OLEINE.

The Cod Liver Oleine for Hospital use, differs only from the Crystal Cod Liver Oleine imported by Bedford Brothers, and now so generally used amongst the wealthier classes, in that it contains a little solid fatty matter, but not sufficient to interfere with its ready digestion.

The Hospital Cod Liver Oleine, like the Crystal Cod Liver Oleine, is tasteless and inodorous.

In Tins, each 15 or 30 gallons (for Hospitals only), at 6s. per gallon.

87, Tower Hill, London, E.C.,
27th May, 1867.

UNIVERSITY LIFE ASSURANCE SOCIETY.
EXTENSION TO FOUNDATION SCHOOLS.

Additions in 1865 at the rate of 1¾ per cent. per annum.

CHARLES McCABE, Secretary.

24, Suffolk-street, London, S.W.

NATIONAL ORTHOPÆDIC HOSPITAL.

LECTURES ON DEFORMITIES will be Delivered on consecutive Tuesdays, at 4 P.M., commencing May 21st, as follows:—

On Angular Curvature of the Spine. By Mr. T. Carr Jackson.
On Infantile Osteo-malachia. By Dr. Dick.
On Talipes Barus. By Mr. L. Stromeyer Little.

Free to Practitioners and Students of Medicine.
Hospital, Great Portland-street, London. W.

W. C. HARVEY, Hon. Sec.

ROYAL COLLEGE OF PHYSICIANS OF LONDON.

TWO LECTURES will be delivered at the College, Pall Mall East, on Friday, June 14th, and Monday, June 17th, at Five o'Clock P.M., by Dr. ANSTIE, on the PROGNOSIS AND TREATMENT OF CERTAIN ACUTE DISEASES, with special reference to the indications afforded by the GRAPHIC STUDY OF THE ARTERIAL PULSE.

(By order of the President.)

1867. W. COPNEY.

ROYAL COLLEGE OF PHYSICIANS OF LONDON.

FIRST PART OR PRIMARY PROFESSIONAL EXAMINATION FOR THE LICENCE.—The next Examination of Students who have completed Two Years of Professional Study at a recognised Medical School will commence on Tuesday, July 2nd.

SECOND PART OR PASS EXAMINATION.—An Examination of gentlemen who are eligible for admission to the second Examination for the Licence will commence on Tuesday, July 9th.

Registered Medical Practitioners qualified before January, 1861, are admitted to Examination under Special Bye-law.

Candidates are required to give fourteen days' notice in writing to the Registrar of the College, with whom all certificates and testimonials required by the Bye-laws are to be left at the same time.

Pall-Mall East, 1867. H. A. PITMAN, M.D., Registrar.

Original Communication.

SELECTED CASES, DEMONSTRATING THE VALUE OF ELECTRICITY AS A CURATIVE AGENT.

By HARRY LOBB.

No. I.—RHEUMATIC PARALYSIS.

In the following series of papers, I propose minutely to describe the method of application of batteries and apparatus necessary for the treatment of each case. As I have received so many requests from medical men, for information on this head, I shall therefore briefly allude to the disease, and devote more space to the treatment. Perhaps of all the diseases that come under the treatment of the medical electrician, rheumatic paralysis is the most amenable to the judicious application of electricity. As a rule, ordinary routine medical treatment has no effect upon this malady, and the disease progresses from bad to worse, until the use of the limb or limbs is completely lost. The following case is a most instructive one, and is a fair type of this disease.

Mr. G—— called upon me on the 20th of last March, with a note from Sir Wm. Fergusson, stating that "the bearer will tell you his story; my idea is that electricity may be of service, and I recommend him to you with that view," and giving the following history, in writing, which I give in his own words. "On Saturday, the 2nd of February, 1867, on returning home in the evening, I felt what appeared to me to be a light blow on my right shoulder, which ached slightly from that moment until I got into bed, the pain then increased in the shoulder, neck, and back of the head, and kept me awake nearly all night. From that time, for three weeks, I did not sleep more than two or three hours in the twenty-four. I took medicine to operate on the liver, and also effervescing draughts to act on the skin. Vapour baths, hot-air baths at the hammam; shampooing, rubbing with stimulating oils, and douches were tried, from all of which I experienced temporary relief, but not of a lasting nature. At the end of six or seven weeks nothing but the rudimentary rheumatic pain was left.

"About the 5th of February, I began to feel great weakness in my right arm and shoulder, and difficulty in shaving and dressing. On the 10th I employed a barber, who shaved me every morning. After the 10th of March I virtually lost the use of my deltoid and biceps, but could always write when my arm was lifted and placed on the table. I saw ——, who gave me a liniment of chloroform and camphor, which proved useless. Afterwards he gave me iodide of potassium, with the like result. My arm not improving in the slightest degree, I consulted Sir W. Fergusson on the 20th of March, who sent me the same day to Mr. Lobb."

On examination, I found the deltoid completely paralyzed, the biceps almost so; both much wasted and very soft; the extensor very weak.

ELECTRICAL EXAMINATION.—The battery I employed is my own Portable Book Electro-Magnetic Battery, made by Ladd. First using the secondary wire, or induced current of electricity, attaching a moist conductor to the positive pole, which I placed upon the spine, I examined the skin covering the affected muscles with a wire-brush attached to the negative pole, using the whole power of the battery.

Sensation was very dull over the deltoid and biceps, and there was no reflex contraction of muscular fibre under the electrical stimulus.

The conductors were now shifted to the primary wire, and two moist conductors were employed. The one from the negative pole was placed beneath the spinous process of the scapula, and the conductor from the positive pole was placed upon the muscle to be stimulated.

On passing the current through the deltoid, faint contractions were discovered in the anterior and posterior fibres, but none whatever in the middle fibres; the biceps contracted feebly; all the other muscles were in tolerable order.

TREATMENT.—A Pulvermacher band was applied, direct current positive pole on the spine, then wound round the deltoid, and the negative pole placed on the lower part of the biceps, and retained in position by an elastic bandage, to be worn night and day; excited once a-day with one part vinegar, and eight parts water. Daily, for half-an-hour, each muscular fibre of the paralyzed muscles to be excited with the inverse current of the primary wire of the electro-magnetic battery.

This treatment, without change, was carried on daily for three weeks, with immediate benefit from the first application, and on the 18th of April, I took Mr. G. to Sir William Fergusson completely cured, enabled to use the deltoid and biceps perfectly.

This is a model case. I have had numerous, somewhat similar ones, but it must be borne in mind that the longer the paralysis has lasted, and the more the muscle has wasted, the longer the treatment will be required before a cure can be effected.

Paralysis of the leg, following sciatica, is not uncommon; the treatment is precisely similar, and the result equally satisfactory. I propose in my next paper describing such a case.

MEDICAL SOCIETY
OF THE
COLLEGE OF PHYSICIANS OF IRELAND.

The President, Professor STOKES, in the Chair.

AT the Meeting of the Medical Society on the evening of Friday the 24th May,

Dr. HERBERT said he was present in consequence of a request conveyed to him by Dr. Guinness, to report some cases of black death alleged to have occurred in the 5th Regiment, during the service of its late surgeon, Dr. Barclay, who had joined the 54th Regiment. He regretted to say that he knew nothing whatever of the cases alleged to have occurred in that regiment. He had heard of some cases of fever which assumed the encephalous form, accompanied by spots of typhus fever, but these were not cases of black death—at least, he did not so consider them. There had been no official report of the cases, but he had written to Dr. Barclay on the subject, and had not yet received an answer. There was one case of black death under treatment in the Hospital of the 5th Regiment. This case occurred during his absence, and he had received the notes of the case taken by Dr. Skene. The soldier, who had bee previously a healthy man, was admitted to hospital, co laining of headache and rigors. Some time after admission he vomited. His pulse was at first very frequent, amounting to 130 or 140 beats in a minute. The extremities were cold; his tongue was cold, and clayey white at the edges, and a dusky brown in the centre. He complained of great thirst, and pain in the head. About eighteen or twenty hours after admission, he complained of intense pain in the right eyeball; symptoms of eritus took place; it was treated with soda water and milk, and a mustard blister was applied to the epigastrium. There were symptoms of encephaletis, and twenty-four hours after admission, spots of the size of a sixpenny piece appeared over his body, and in a few hours increased to the size of a shilling, and in three or four hours afterwards, to the size of half-a-crown. He was treated with stimulants—beef-tea enemeta, &c., and was reported by Dr. Skene to be progressing well. Since Dr. Skene had gone on leave of absence, mortification of both feet had set in—one patch, as large as an ordinary lozenge box, being over the ball of the right toe, and on the opposite foot there was a mortified patch under the ball of the little toe, about the size of half-a-crown. These spots of superficial mortification had been rubbed with a stimulating embrocation, and the whole depth of the integuments had sloughed away.

Dr. Law said he desired to bring under the notice of the Society some cases of what was called cerebro-spinal meningitis. The peculiar phenomena were, remarkable prostration of strength, with violent pain of the head, and pain proceeding in the direction of the nerves of the spine across the body, a sense of construction extending down the arms and legs, reminding him strongly of the complaints that were made by the patients in the fever of 1848, an aggravation of those symptoms that the French call malaise, fidgetiness, and the patients commonly complained of pains in the bones. He brought forward a group of ten cases before the Association, and he mentioned at the time that he had no opportunity, inasmuch as there was no fatal case of ascertaining what the lesion was. At that time he proposed the question, what was the real pathology of this disease? Was it essentially an affection of the spinal system, or was it to be looked on as involving the nervous system? In the end of last June a case was brought into Sir Patrick Dun's Hospital. It was a young female aged 12 years. She had been bathing the day before, and gone to bed perfectly well, but awoke in the night screaming with violent pain of the head and sickness of the stomach. The pain in the head and sickness of stomach, and vomiting continued until she was brought into the hospital at four o'clock on the next day. She was then in a state of complete collapse, the pulse scarcely to be felt, the body perfectly livid, a deep blue stained colour with a remarkable eruption especially on the left leg. There were spots, maculæ varying in size. First of all there was a general dark colour of the whole body, and then there were patches of ecchymosis along the limbs with elevated spots, and a remarkable tubercle on one leg. The vomiting continued for some time; she had remarkable hyperæsthenia, extreme restlessness, could scarcely be kept in bed, worked strongly in convulsions, and especially on the left side. However, the convulsions were choreac movements rather than epileptic convulsions. The only thing that could be done was to sustain her as best they could. Everything which they gave her was rejected, and enemata of brandy and beef-tea were the only means by which her strength could be sustained. They applied belladonna down the back, and as soon as she could swallow she got pills consisting of mercury, quinine, and extract of belladonna. The giving of belladonna in this case was suggested by an interesting case of Dr. Byrne's where it was found most effective in relieving tetanus, and he (Dr. Law) was astonished to see how greatly the convulsions ceased on taking it for a short time. On the second day of illness the head of the girl was violently retracted, she complained of a most agonizing pain in the head, especially over the occiput. A blister was applied here, and afforded her a little relief, but not much. On the fifth day after admission she complained of the most violent aggravation of the headache, and this was shortly followed by copious epistaxis, and from that time forward her head was completely relieved. They gave her mercurials, the mouth was slightly affected, and on the seventh day she began to improve, and accordingly as she improved the eruption on the extremities began to fade, and on the fourteenth day she was pronounced convalescent. The head was still retracted, producing a peculiar appearance. No matter in what direction she placed herself the head was rigidly fixed, and the muscles would not admit of any motion. The case went on, she improved up to the end of the month, when he lost sight of her. She then became Dr. H. Kennedy's patient, and he told him that when she came under his care she had sickness of the stomach. He was surprized to hear that the child had relapsed, and on inquiry was told by the nurse that she had taken something which disagreed with her. Now, he (Dr. Law) thought this was a connecting link between these extraordinary cases that occurred as the first epidemic, and those that afterwards appeared and were called the black death. It was better that that name should be given up. He thought it an unfortunate name, for it led people to expect that this disease would be something like the plague. He should mention that a case similar exactly to the one he spoke of had come under the observation of Dr. Byrne, with this exception, that his case was of a worse type, for the patient died. Dr. Byrne thought it at first a case of cholera, and he (Dr. Law) should have thought so too, although they had not the sunken eye and whispering voice of cholera. Many of these cases of cerebro-spinal arachnitis were mistaken for cholera, and it was a remarkable fact that it had always followed in the wake of cholera.

Dr. Aquilla Smith observed that some of the gentlemen who had communicated cases of this disease had spoken of it as "black death." The members of the profession generally were well aware of the great alarm which had been caused in the city in consequence of this name having been given to this form of fever; and it appeared to him desirable that there should be some expression of opinion on the part of the Society to repudiate the term "black death" as a name for this disease. Every one knew that the black death of the middle ages was a true buboe plague, and had no similarity to the form of disease which they were now considering. He was very glad that Dr. Lyons had pleaded guilty to having given the disease a very bad name. It would be in the recollection of the meeting that Dr. Lyons suggested that it should be called "black fever." He objected to that name also—the word "black" being calculated to cause much unnecessary alarm. From what he had heard of the nature of the disease, he should be inclined to term it malignant petechial fever.

The President said the meeting was indebted to Dr. Smith for his observations. The term black death was an improper term. The black death of the middle ages was nothing but the plague of the Levant that had spread over Europe. Dr. Lyons had given up that name, and he was quite sure it would be the feeling of the meeting that the name should be forgotten. It was not very easy to invent a name for this disease. It was his intention in the concluding observations which he would make that evening, to propose the name of "malignant purpuric fever." Still, no doubt, it was a special and most peculiar disease, and a disease which, although it had been observed in other countries, and long observed in America, was, so far as he could see, new to this country.

Dr. Darby said he had been looking into Hecker, and he thought there were some grounds for justifying Dr. Lyons on the first blush of the moment, in giving the disease the name which was now objected to. He thought there was something very analogous to the cases they were now discussing, related in Hecker—the vomiting, bleeding, and head symptoms were all described, and there was no very remote difference between them, except in the absence, in this disease, of the buboes. There were black spots, discharges of blood, and head symptoms common to both. He wished to bring under their notice, two cases which came under his observation. A girl, fifteen years of age, was sent into his hospital from Kingstown, on the 22nd of March. Her head was thrown back; she had spots on the skin; grinding of the teeth, and convulsions. She died in four or five weeks after admission. He made a post-mortem examination, and found lymph in the pons varolii, and congestion of the membranes of the spine. The spots which were on the body, faded away, and, as they disappeared, they assumed that yellow and green appearance exhibited in the disappearance of a common bruise. Death, which occurred in the last week of April, took place apparently from exhaustion. All the time of her illness, the patient had grinding of the teeth and retracted head, and the retraction continued till within two days of her death. What struck him as remarkable in this case was, that the spots faded, becoming green and yellow, and drab-coloured, for some time before she died. He had another case in his own institution, of a boy who was attacked with acute purpura hæmorrhagica. That boy recovered, and the spots on his body pursued the same course as in the case of the girl, assuming different shades of colour, and gradually disappearing. It struck him that there must be some pecu-

liar epidemic character in this disease, for he had heard of several friends of his having lately seen cases of purpura, which was not a disease met with every day. One of the cases which he had mentioned, certainly had spinal arachnitis.

Dr. Law said he desired to propound the question. What is to be regarded as the real pathology of this disease? From what he had seen himself, and from what he had heard, he confessed he looked upon it, no matter how modified, as cerebro-spinal arachnitis. The very interesting details which they had had from several members, and especially those presented by Dr. Haverty, confirmed him in this opinion. Every one of the cases mentioned by Dr. Haverty, exhibited distinct signs of inflammation of the membranes of the base of the brain. If the pathology of the disease did not consist there, what was it? Was it a modification of fever? If it were, it was unlike any fever they had ever seen or known in this country. They had never known or met with a case of fever terminating fatally in sixteen hours, and perhaps there was no place where they had unfortunately a better opportunity of seeing fever in all its modifications, than in this country. They had never seen anything of this kind in fever, nor had they seen fever complicated with this affection of the spinal membrane. On the contrary, most persons who had directed their attention to affections of the nervous system, had observed the appearance of eruptions in such cases. He alluded especially to Dr. Hanfield Jones who, in his Lumleian work on diseases of the nervous system, observed how frequently these eruptions on the skin are found to be associated with purely nervous affections. He alluded to a case in which a person presented on the skin an eruption like bad scarlatina; and in other cases it was not an unfrequent thing with surgeons in operations, to observe these eruptions on the skin, resembling the purple spots in the disease now under consideration, and which took place when there seemed to be no other lesion than the shock of the muscular system. They all knew how nervous impressions led to this kind of bleeding—extensive purpura, with bleeding from the gums. They might recall a case of a gentleman who died from bleeding, caused by mental impressions, and where these large purple patches presented themselves before death. Every case that had yet been brought forward, exhibited marks of inflammation of the membranes of the brain, and, therefore, he thought they were warranted in supposing that there was an intimate relation between this disease and cerebro-spinal arachnitis. There was, certainly, no fever ever yet met with in this country, at least, that had exhibited this peculiar condition of the nervous system. If there be any modification of fever to which this disease could be referred, it was not any fever with which we were familiar, but it might be the intermittent fever which occurred in other countries.

Dr. Quinlan thought the expression "black death" was not a bad one, as descriptive of the peculiar feature of the disease. The black death which devastated Europe in the middle ages was the plague of the East which existed at the present day, and came over to England in consequence of the low sanitary condition in which England then was. He believed that when the plague invaded England on that occasion, this country had the same fortunate exemption from it which it had from the rinderpest last year. He thought the expression black fever, if it did not express the very nature of the disease, was not altogether inappropriate.

Dr. Aquilla Smith, in reference to the statement made by Dr. Quinlan, that the "Black Death" had not reached Ireland, directed the attention of the meeting to the brief account of the pestilence given in Clynn's "Annals of Ireland," published by the Irish Archæological Society in 1849, which is of great historical value on account of the very scanty information given in Hecker's admirable history of the "Black Death," respecting the progress of the pestilence in Ireland, which is composed in the following words: "Ireland was much less heavily visited than England. The disease seems to have scarcely reached the mountainous districts of that kingdom."

Clynn's account of the "Black Death" in Ireland:—

"Item, hoc anno [1348] et maxime mense Septembri et Octobri convenerunt undique de diversis partibus Hiberniæ, episcopi et prelati, viri ecclesiastici et religiosi, magnates et alii, et communiter omnes utriusque sexus ad peregrinacionem et vadacionem aque de Thaht-Molingis (St. Moling's, Co. Carlow) turmatim et in multitudine, sic ut multa milia hominum simul illuc multis diebus convenire videres, quidam venerunt devocionis affectu, alii (sed plures) pestilencie metu, que tunc nimis invaluit, que primo juxta Dubliniam apud Howht [Dalkey—*in margine*] et Drovda [Drogheda] incepit, ipsas civitates Dubliniam et Drovhda fere destruxit et vastavit incolis et hominibus. Ita ut in Dublinia tantum, a principio Augusti usque nativitatem Domini xiiij. millia hominum mortui sunt. Ista pestilencia sic erat contagiosa quod tangentes mortuos vel inde infirmos incontinenter et inficiebantur et moriebantur, et confitens et confessor simul ducerenter ad sepulchrum. Et pre timore et horrore, pietatis opera et misericordie, videlicet, visitare informos et mortuos sepellire, homines excercere vix audebant. Nam multi ex antrace et ex apostematibus, et pustulis que creverunt in tibiis et sub asellis (axillis), alii ex passione capitis et quasi in frenesim versi, alli spuendo sanguinem moriebautur. In conventu Minorum de Drouda xxv. et in Dublinia apud eosdem xxiij. fratus mortui sunt, ante usque Natalæ. Ista pestilencia apud Kilkenniam in xl°. [*i.e.*—Lent] invaliut, nam vi° die Marcii viij. Fratres Predicatores infra diem Natate obierunt, vix in domo unus tantum moriebatur, sed communiter vir et uxor cum natis corum et familia unam viam, scilicet mortis, transierunt. Ego antem frater Johannes Clyn de ordine Minorum et conventu Kilkennie hec notabilia facta, que tempore meo acciderunt, in hoc libro scripsi, que oululata fide vel fide digno relatu didici, et ne gesta notabilia cum tempore perirent et a memoria recederent futurorum, videns hec multa mala et mundum totum quasi in maligno positum, inter mortuos mortem exputants donec venial, sicut verauter andivi et examinavi sic in scripturam redegi, et ne scriptura cum scriptore pereat, et opus simul cum operario deficiat, dimitto pergamenam pro opere contimando, si forte in futuro homo superstes remaneat, an aliquis de genese Ade hanæ pestilenciam possit evadere et opus continnare inceptum."

Dr. M'Swiney said the valuable observations which had fallen on that and on the previous night from the different gentlemen who had brought forward cases would appear to him to clearly point out that within the last twelve or eighteen months there had been a number of cases of cerebro-spinal arachnitis, of the most fatal character, in Dublin; and, secondly, that there had been a malady which had been characterized by some competent observers as quite new, and the like of which they had never witnessed or even read of before. This latter malady was characterized by an extreme fatality, by the suddenness with which it occurred, and by a remarkable eruption, the nature of which was under consideration. The two cases which came under his observation rather rapidly served to illustrate in the most typical manner these two forms of disease. They were both cases recorded in the proceedings of the Pathological Society, one having been brought forward in the month of January, and the other in February last. One case of cerebro-spinal arachnitis, the subject of it being a little boy, was instantaneous in its invasion. There were no premonitory symptoms. He fell into convulsions, was severely tetanized, and died, without once regaining consciousness, in the seventeenth hour of his illness. The brain and spinal cord bore well-marked evidence of intense congestion. There was probably no time for the effusion of lymph, and the most remarkable pathological circumstance was that an inch and a-half of the spinal cord had undergone the most complete softening, and was broken up so as to resemble cream. This boy was unspotted, and the case was

regarded as one of spinal meningitis. In a week afterwards, a case most rapidly fatal occurred. It was that of a little girl, who was first seized by illness at eight o'clock in the morning—the first illness being marked by rigor, followed by nausea and then vomiting. The mother exhibited drinks from eight o'clock until eleven, each drink being thrown off almost immediately. At eleven o'clock purple spots were noticed on the child's face, and the mother, becoming alarmed, then took advice. At three o'clock the child was dead—four hours after the purple spots manifested themselves, and eleven hours after the vomiting commenced. The brain and spinal cord were examined at the Pathological Society, and no pathological evidence of any lesion, save the single one of the diffusion of small spots of blood in the brain, was discovered in the child's body. What the decision of the Society would be as to the connection or non-connection of these cases, he could not, of course, anticipate. He was, however, of opinion that they were distinct diseases. He heard with some pleasure the recommendation to abolish that most inexpressive name which the disease had received, the more so as, at the meeting of the Pathological Society at which he brought forward the case, he for the first time proposed that something like a scientific nomenclature should be adopted. He stated that he knew of no disease which it resembled so much as purpura, and he proposed that it should be called malignant purpuric exanthem or malignant purpura. It might be within the knowledge of men who had extensive practice that there were threatenings at present of an epidemic of purpura. In the hospital which he was attached to, cases with purpuric symptoms were not rare. He had himself under his care, in an institution four miles from town, two ladies, sisters, of advanced age, who had large patches of purpura on their extremities, some black, some red, and some green, as the blood was dying away. In this case the disease was certainly not due to an insufficiency of food. Dr. Lyons, as they all knew, was under the impression that attacks of disease such as this purpuric fever, preceded great and wide-spread epidemics such as cholera.

Dr. Bennett rose to bring forward a case which had occurred in Sir Patrick Dun's Hospital, presenting a complication of pericarditis, with symptoms of cerebro-spinal arachnitis, and the eruption of the present epidemic. The facts of the case were as follows :—

A little girl, 5 years of age, was admitted into Sir P. Dun's Hospital on the morning of 15th March, having been ill for the three previous days. She lay with the head retracted, and the spinal muscles were rigid, the legs and arms were flexed, but not rigidly. She complained of intense pain in the head, and placed her hand on the forehead when asked where the pain was; her cheeks were flushed; the tongue was readily protruded, and was coated with a thick grey fur; the respiration was very irregular; some small spots which did not disappear on pressure were scattered over the arms and legs, a few were on the trunk, and one, the largest and most recently formed, was seated on the left eyelid. These spots were the same as those observed in the greater number of the cases of the present epidemic, and were blood extravasations, some of them being raised above the surface, others ordinary petechiæ. The child suffered much from thirst, and swallowed water greedily. She was very watchful, and suffered much from intolerance of light, her eyes were bright, and her pupils much contracted; her pulse was hurried, small and weak, but regular; the heart's action was strong and jerking; a loud and continuous murmur was heard all over the cardiac region, and was prolonged into the great vessels. On the sixth day a pericardial friction murmur was audible with the first sound, and a few days later facial paralysis of the left side occurred, while the tongue deviated slightly to the right. There was at this time a remarkable blush on the paralysed side of the face, while the opposite side was quite pale. The spots faded in a few days without any fresh crop appearing. The case went through a series of alterations until it seemed almost certain that death was imminent, and at one time the temperature was 95. Finally, after this the case had rallied, and had gone on to convalescence, with a diminution of the facial paralysis. He thought that the symptoms of this case warranted him in bringing it forward, as being referrible to the present epidemic, and he thought also the occurrence of facial paralysis, and also paralysis of the tongue, and the peculiar aspect of the face, exclusive of the more general symptoms, were very strong evidence that if the case had ended fatally they would have found the evidence of inflammation of the brain and cord. He brought the case forward for two reasons—first, as it presents the complication of cardiac inflammation, which, as far as he knew, had been observed in but one other instance during the present epidemic; and, secondly, as he believed that the case threw much light on cases recorded both by Dr. Mayne and Dr. Graves. In Dr. Mayne's case, which he published in the proceedings of the Pathological Society, a similar group of symptoms occurred, but no eruption. He being at the time engaged with cases of the former epidemic, recognised the case, and set it down as meningitis. After death the heart, which had not been examined during life, was found inflamed, and the brain and cord free from inflammation. Dr. Mayne published the case to warn others against what he thought was an error, and seems to have referred the symptoms in his case entirely to reflex irritation, due to the pericarditis. He (Dr. Bennett) thought it highly probable that Dr. Mayne's case was one of those that had been met with in the present epidemic, where, though the symptoms of inflammation of the brain and cord were present, the post-mortem evidence was wanting, and in which it became necessary to attribute the symptoms to the action of a specific poison. Dr. Graves published a case in one of his lectures which presented most of the symptoms of the present epidemic, and in addition, a murmur, or rather murmurs, in the cardiac region of nearly identical character with the present case. Dr. Graves concludes that the case was entirely due to anæmia. He (Dr. Bennett) was strongly inclined to regard it as identical with this case in every way—at least such an explanation was more evident than Dr. Graves'. He thought the consideration of these cases must lead them to conclude that the cerebro-spinal meningitis, while it was the most frequent pathological result of the specific poison of this epidemic was not the necessary one. They must refer all the cases to one cause not for the first time acting, not different absolutely from the poison of 1846, but varying from it in its greater tendency to produce cutaneous eruptions as one of the earliest results of its action.

Dr. Grimshaw desired to mention a case which he thought was of some interest. It presented a feature which was observed in one of Dr. Hughes's cases—namely, a vesicular eruption over a portion of the body. It had no symptoms whatever of cerebro-spinal arachnitis. The disease only lasted eight days. The patient was a woman of 32 years of age, was married, and had had several children. She was admitted into hospital under the care of Dr. Kennedy, was then transferred to him (Dr. Grimshaw), and afterwards to Dr. Moore, who had sent the case back to him. On admission to hospital the patient presented a very remarkable appearance; her face was covered with vesicles somewhat resembling small-pox. These vesicles were surrounded with inflamed areola. In some the appearance was as if a black line had been drawn round the vesicle and "smudged off" over the surrounding skin. The fingers of both hands were quite black and covered with large bullæ, moveable under the cuticle as in cases of commencing gangrene. There were a large number of vesicles on the upper part of the right arm, and on the left arm. All over the lower part of the abdomen, the sacral regions and nates, the vesicles were very numerous and much darker than elsewhere, giving the whole of these parts of the body almost a black appearance. On the lower extremities there were scarcely any vesicles, but the feet were black and swollen, and an old ulcer on the right leg had put on a gangrenous appearance, large sloughs

having formed around it for the space of a couple of inches. She presented no symptoms of arachnitis. The temperature at the time of admission was 105 ; it fell to 99, and on the day of her death rose to 101. The immediate cause of her death seemed to be the extension of her disease to the mucous membranes. She complained of soreness of the mouth and throat, and difficulty of swallowing ; and on examination the mucous membranes of the mouth and fauces seemed ulcerated, and detached in many places. The chest became engaged, the whole of the lungs filled with bronchitis, and the immediate cause of death seemed to be the bronchitis. The pulse was at first 140 ; it fell to 84 on the day before her death, and on that day it was found impossible to count it. The case was considered by all his colleagues to be one of the class which they were now describing. It was stated that she had syphilis ten years ago, for which she received no treatment. The question arose in his mind as to whether this was not purpura, but on looking to the books in which that disease was described he came to the conclusion that it did not bear any resemblance to it.

Dr. Gordon—It seemed quite conceded that the title of black death was not to be used any longer, and also that this disease was not a new one, but in many respects similar to the epidemics which had occurred at various times on the Continent of Europe, and in America. It remained only to settle what the title of this disease was to be. He should think the only true ground to go upon for nomenclature, would be to endeavour to find out what the strict nature of the disease was, and not to define it, or call it by any *symptom* which might arise. From the number of cases that had occurred in which two sets of symptoms, one which was (in his opinion erroneously) supposed to be a lesion of the circulation, the other a lesion of the nervous centres, had been developed so largely, they must, *a priori*, expect that they both had their origin in the same affection. Very few indeed, if any, of these cases which are characterized by one predominant set of symptoms, are altogether deficient in the symptoms of the other form. But, in his opinion, these eruptions were all a symptom of nervous lesion (the sympathetic probably) rather than a direct symptom of lesion of circulation, and many of these cases presented also symptoms of actual pathological changes in the nervous centres. They were not to expect in every case decidedly marked symptoms of disease of the nervous centres, but there had not occurred to him any cases in which one or more symptoms, strictly referrible to the nervous centres, were not present, and whether there was a well-marked retraction of the head, or a dark coloured eruption, the case was equally preceded by nervous disease. Dr. McSwiney was in error in supposing that the cases he referred to was the most rapid on record, or that on account of the shortness of its duration, organic change could not have taken place. He had recorded (see *Dublin Quarterly Journal*, May 1) a case which had lasted not quite five hours, and, on parts of the brain, was found a very thin layer of purulent effusion. From an analysis of a great number of cases (there had been more than thirty in the Hardwicke Hospital, dating back to his first case in April, 1866), he would say, that the two sets of symptoms, as they were termed, must be referred to the one cause, and, therefore, he would be disposed to call the disease *Fever with cerebro-spinal meningitis*. The eruption in these cases differed in many respects from purpura, which, at all events, could be looked upon as only a symptom, and therefore he considered the term "purpuric fever" to be erroneous.

Dr. Little said that in the case which occurred in Trinity College, pleurisy as well as bronchitis came on before death. One of the first questions, as it seemed to him, which they had to decide, was whether this new epidemic was due to local causes or to blood-poisoning. He thought when they found that the serous covering of the heart and lungs are likely to be affected, it appeared to him that they were dealing with poisoning of the blood. In the other case in the College, the eruptions came out symetrically, and the symptoms of cerebro-spinal arachnitis were well-marked. Death took place in seventy-two hours, and six or eight hours before death the bronchial affection was first discovered.

Dr. Henry Kennedy congratulated the Association on the great mass of valuable information brought before it ; and this, he said, was the more important as the present disease was so scattered about that five or six cases might be considered a large experience. Three views of this disease had been advanced—one that it was a malignant spotted fever ; a second that its essence was a cerebro-spinal arachnitis ; and the third that the two diseases co-existed, the one being superadded, as it were, to the other. He then went on to say :—I myself hold the latter view, having a strong conviction that this is the proper way to consider the question. Before speaking of the disease itself, I would call attention to the fact that when any of the acute affections assume a great malignity, they run their course very much more rapidly than is usual ; and, what is very important to bear in mind, present then a series of symptoms wonderfully similar to each other. As examples of what I myself have seen I may mention scarlatina, the disease known as acute jaundice, and our common typhus, when it assumes a very bad form. Some years back I saw many cases of scarlatina which terminated within forty-eight hours—the prominent symptoms being vomiting, purging, stupor, coma, convulsions. With the exception of purging, it was just the same with the cases of acute jaundice, of which I have seen five instances ; whilst of cases of the worst typhus, and I have seen it run its course in six days, the symptoms were vomiting, stupor, coma ; convulsions very rarely occurring. In this last disease the appearance of the body after death was often very remarkable, the veins having allowed a part of their contents to escape, and there existing, at the same time, general mottling, not distinct petechiæ. But further, when I made an examination of any of these three diseases, I found appearances which were wonderfully similar one to the other ; that is, I found violent congestions affecting the brain, extending down the spinal marrow, and attended by more or less serous effusion, which, in the cases of common fever, was often tinged with blood. Now it will be observed that the symptoms during life were in all referrible to the brain and spine, and the appearances after death were, I think I may say identical, and I believe are not to be classed as in any way connected with inflammation. As I go on the meeting will see the bearing of these remarks. It was in 1846 that Dr. Darby, of Bray, first described, in this country, some cases of spinal arachnitis. His remarks were very shortly followed by a paper of the late Dr. Mayne, and neither of these observers say a word about the presence of spots, though they describe the disease with great clearness. Hence, I look upon it as certain that, at that period at least, no spots existed ; and it may be mentioned in passing, I myself saw, at the South Workhouse, several of the cases on which Dr. Mayne's paper was founded, and I also saw one case where acute pleuritis was alone found, though the symptoms during life were entirely referrible to the brain and spinal marrow. Since 1846 the disease seems to have disappeared till about two years since, when cases began to appear in the wards of the Cork-street Hospital. These at first were all simple cases of the disease ; but though very well-marked they did not present the same intensity of symptoms as in the year 1846 ; neither was the disease confined to boys, as happened in the first instance. Adults were now attacked, and, in my own wards, more females than males. In a very short time, however, the disease became a complication of our ordinary typhus, and then many of the cases presented the ordinary spots and other signs of typhus, together with well-marked symptoms of spinal arachnitis. In other cases again, the patients came in with typhus, being spotted, and then, in the progress of the case, spinal arachnitis set in. Neither was this last observed in one type of fever alone ; and the tendency to the affection was very remarkable. Three young females,

two of them being between twenty and thirty years of age, were attacked with the disease, and nearly at the same time, one of them very severely. The first had had typhoid, from which she was quite convalescent; the second was passing through gastric fever when attacked, her life was in the balance for many days; the third had had common fever, and was up before the spinal arachnitis showed itself. Now it was whilst this state of things was going on that the new and much more terrible disease, which, for the present, and following the great majority of the American writers, I shall call "spotted fever," appeared amongst us. Is it likely, I would ask here, and keeping in mind the facts just stated, that this new affection is but a modification of spinal arachnitis. I cannot think so. We saw that this latter affection first existed *per se*, then became a complication of typhus and other types of fever. Where is the difficulty in supposing that it may also be a complication of the "spotted fever?" This view, and this only, appears to me capable of explaining all the facts known. For, whilst it must be admitted that the great majority of the cases presented the remarkable spots and spinal arachnitis at the same time, it is not to be forgotten that many of the cases which had the spots did not present any symptoms referrible to the brain or spine. One well-marked instance of this was given to-night by Dr. M'Swiney, and of the two cases which came under my own notice, one had no symptoms whatever referrible to either the brain or spine. I know, too, that many similar instances have been met by others; and when such cases have been examined, no trace of inflammatory action has been found in either the brain or spine. For I do not admit that congestion, with some serous effusion—which, it will be recollected, is a state common to any of the acute diseases that run a very rapid course—is due to inflammation. If it be, then the essence of our typhus fever must be inflammation, which I presume few will maintain. Taking, then, all the facts at present known, and more particularly the one that our typhus fever has, within these two years, been frequently complicated by spinal arachnitis, into consideration, it appears to me that no other conclusion can be arrived at than that the late terrible disease which has visited us is a specific fever, and that the spinal arachnitis is but a complication, which may or may not be present. On the treatment of the spinal arachnitis, when it complicates common typhus, I have got the idea that it is not usually as actively treated as it requires. In my own hands I know that antiphlogistics, including local bleeding and mercury, have been followed by the most satisfactory results; and when the disease was seen very early a fatal result was most unusual.

(To be continued.)

HARVEIAN SOCIETY OF LONDON—May 23.

Dr. J. E. Pollock, President.

THE PREVENTION OF VENEREAL DISEASE.

At the fifth meeting of the Harveian Society's Committee, the following communications were read:—

Mr. Rooke reports from the *Dreadnought* Seamen's Hospital, that there are a daily number of forty-seven male cases seen there on an average, or about one-third of the surgical patients. No special beds are reserved for venereal cases. "This return chiefly represents the primary affection. Many of the sequelæ of syphilis, such as ulcers, diseases of bones, and internal organs, are not included. If the Contagious Act were extended to the waterside parishes of the chief mercantile ports the advantages to the sailors of the mercantile marine would be incalculable. The history of our patients proves that they are exposed to, and contract disease, immediately on the arrival of their ships in port. The sailors of many ships are picked up by lodging-house keepers, who provide them with beds, liquors, and diseased women, whilst they are waiting to be paid their wages. Consequently, when the sailor goes to the shipping-office to receive his pay, the larger part, if not all, is already pledged to the boarding-house keeper. In a very few days he applies for admission on board the *Dreadnought*, suffering from syphilis, and often from delirium tremens. The class of women who consort with sailors, are of the lowest order, so that the difficulties of carrying out a systematic inspection would be very little."

Dr. Rogers reports from the Strand Union, an average daily attendance of two males and three female venereal patients, or about ten per cent. of the surgical cases. There are no venereal beds in the workhouse; "we always send our patients to the Lock Hospital."

The report from Whitechapel Workhouse gives an average daily attendance of one male and one female venereal patient. There are ten male and fifteen female venereal beds in the workhouse.

The report from the Poplar Hospital says, that only two or three venereal patients are seen daily. "There are no beds for lock patients, the beds being entirely reserved for accidents."

The report from the City of London Workhouse shows, that there are no beds for venereal patients in the workhouse, and, "perhaps, not four such cases are treated during the whole year."

Mr. Guye reports from the Paddington Workhouse, that "the Guardians subscribe liberally to the Lock Hospital, and not more than a dozen cases come to the Workhouse Infirmary during twelve months, to remain but a day or two in the receiving wards, previous to reception into the Lock. No beds are, therefore, reserved for venereal cases."

The report from St. Olave's Workhouse gives a daily average of five female patients, or one in forty of the surgical cases seen. There are three beds for males, and five for female venereal patients.

Dr. Bullen reports from the Lambeth Workhouse, that there are about two a-week of in-patients' venereal cases during the year. "I have had from eleven to twelve cases of females in a ward at one time."

Dr. Clark reports from Shoreditch Workhouse, that syphilitic patients are sent from thence to the Lock Hospital. That "we treat somewhere about thirty patients yearly with gonorrhœa, and the sequelæ of syphilis. We have no beds for venereal patients."

Dr. Skegg reports from St. Martin's Workhouse, that there is a daily average of two male and three female venereal patients seen there, or one in thirty of the surgical patients. "No special number of beds for Lock cases."

The report from Hackney Workhouse gives a daily average of two males and three female venereal patients. There are four beds for males and five for female venereal cases.

Dr. Smart reports from Bethnal Green Workhouse, "the number of cases which come under my notice is very small at present. I have only one case of gonorrhœa, and about six cases of secondary syphilis. I do not suppose I get more than twenty cases during the year. I have no beds set apart for such cases."

Mr. Harris reports from St. Luke's Workhouse that there are no venereal patients seen there—no venereal beds in the hospital. "Under the Poor-law, venereal cases, as such, are not received. Destitution is the plea. No venereal disease is seen by me, as Medical Officer, except occasional broken-down constitutions under secondary and tertiary syphilis."

Dr. William Bennett reports from St. Giles's Workhouse that "there are scarcely any venereal out-patients. The few who apply to be admitted are nearly always females, and they are sent to the Lock Hospital, with the exception of an occasional case of secondary syphilis."

Dr. Williams reports from the Hospital for Sick Children, Great Ormond-street, that the number of syphilitic children treated during the year 1866 was 93 males and 105 females; or in the proportion of 1 to 7 and 1 to 4 of the surgical patients seen during the year. "There are no beds set apart for such cases, although syphilitic children are, of course, admitted."

Dr. Smith reports from Notting-hill Dispensary that there is a daily average of 5 males and 3 females, or about 1 in 8 of the cases venereal. No beds.

Mr. Hunt reports from the Western Dispensary for Diseases of the Skin, that there are no in-patients. "It is rare that a case of primary syphilis appears for treatment; but the secondary and tertiary forms are very common. During the last 40 days about 800 patients have been under treatment; of these, about 100 were syphilitic, nearly equally divided among males and females, and comprising young infants, a small proportion. Very few prostitutes ever attend here."

Mr. Lewis reports from the Western Ophthalmic Hospital,

that "out of 2040 cases treated during the past year, 11 are described as syphilitic."

Mr. Hulme reports from the Central London Ophthalmic Hospital, that of 2000 cases seen annually by him, or 40 a-week —of these 40, about 7 are venereal iritis or keratitis.

Dr. DRYSDALE said that Mr. Jonathan Hutchinson's report to the Venereal Committee showed that out of 65 patients seen by him on one morning at the Ophthalmic Hospital, Moorfields, 13 were venereal cases, or 1 in 5.

The PRESIDENT remarked on the fact that the workhouses seemed to send all their venereal patients away. Would Mr. Lane explain how they managed at the Lock?

Mr. LANE said that the Governors of the Lock had the privilege, as usual, on subscribing five guineas, of sending a certain number of patients there annually. The workhouses, therefore, subscribed 10, 20, or even more guineas annually, and sent their venereal cases there. If they did their best in the Lock, they had never more than 30 beds for such cases, and were obliged constantly to send them away. The rest of the beds in the Lock Hospital were for Government cases.

Mr. CURGENVEN said that he had observed that at the Royal Free Hospital, the worst cases were sent there from the workhouses.

Mr. LANE said that provision should be made in Mr. Hardy's Act, now before Parliament, for the admission of venereal cases into workhouse hospitals.

Dr. TILBURY FOX stated that Mr. Hardy's Act was already in operation.

The following motion was made by Dr. CHARLES DRYSDALE, seconded by Mr. JAMES LANE, and carried unanimously:—

"That this Committee (considering the vast amount of preventible venereal disease existing in London, and also the fact that destitute women, when suffering from such diseases, are not admitted into the workhouse infirmaries, but, in the majority of cases, sent to the Lock Hospital, which is quite inadequate for their reception) are of opinion that immediate provision should be made for the reception of destitute persons suffering from this disease, either in special hospitals, or in special wards, set apart for such cases in the workhouse infirmaries; and they would earnestly recommend that provision should be made for this purpose on the carrying out of Mr. Hardy's Bill."

Mr. JAMES LANE said that now was the time to secure such provision. Diseased prostitutes were at present obliged to go on with their trade, in order to live.

Mr. CURGENVEN said that there was to be a general rate over the whole of London for the maintenance of the hospitals under Mr. Hardy's Act.

Dr. BEIGEL said that prostitutes are liable in Prussia to imprisonment for five months, and, if foreigners, may be banished. Procurers, also, are liable to imprisonment for a time not less than six months, with hard labour. According to the old law, punishment was awarded to women for infecting men, with hard labour, for a period of years. Unqualified persons are fined if they attempt to cure syphilis. Dr. Beigel also added that the enlargement of accommodation in Prussia had much lessened diseases, whilst the registration of women had not seemed to him of much use in Berlin towards that end.

Dr. C. DRYSDALE said that Mr. Cutler, in his evidence before the Venereal Diseases' Committee, had shown that in the Prussian camp, with 20,000 men, there were only in 1865, seven men and four women diseased, whilst at Aldershot nearly half the men were diseased.

The PRESIDENT asked Dr. Stuart, of Woolwich, who has the charge of the inspection of prostitutes in that town, to be so kind as to give the Committee some information as to the effects of his inspection.

Dr. STUART, of Woolwich, said that the action of the Contagious Diseases' Act, 1866, had been most salutary as far as Woolwich was concerned. In October, 1866, the proportion of venereal cases to the number of troops stationed there was as 1·75 per cent. of the number. In April, 1867, this had decreased to ·5 per cent. At first the women who were examined were very frequently and gravely diseased; but latterly disease was much less frequent, and milder in type. There was no registration for the women, so that as yet the examinations had only extended to the lowest classes of them. These were by no means averse to being examined. When diseased the girls were sent to the Lock Hospital. The examinations were conducted in a small house adjoining to his own private residence.

Mr. JAMES LANE said that there was a remarkable contrast between the cases now sent from Woolwich and those which formerly came from it, and there was an equally striking contrast between the cases sent from workhouses and by the Government now; the latter being so much milder.

It was proposed by Mr. JAMES LANE seconded by Dr. TILBURY FOX, and carried by the meeting, "That this Committee is of opinion that the clauses contained in the Contagious Diseases' Act, 1866, might, with some slight and obvious alterations, be adopted in the carrying out of the regulations formerly proposed by Mr. Lane, and accepted by the Committee."

Dr. VINTRAS said that venereal cases ought to be admitted into ordinary hospitals. He did not think the Governors would care what class of cases were taken in.

Dr. BEIGEL said that at the Metropolitan Free Hospital the Governors paid their money and never troubled themselves with the class of cases.

Dr. DRYSDALE said that this was only the case in the more liberal and generous hospitals. It was quite different in many others.

Mr. CURGENVEN said that, if the ordinary run of Governors knew that venereal diseases were treated in a hospital, they would no longer subscribe, and Guy's and Bartholomew's had large private funds, which accounted for their venereal beds.

Mr. LANE said that it should not be left to the mercy of Governors whether this class of cases should be treated or not, and therefore Government or parish funds should be used for the purpose of providing accommodation for female venereal patients.

It was arranged that a sub-committee be formed to write a report and present it to the committee at an early date, and that a general meeting of the Profession should be held at the latter end of June, when the presence of several members of Parliament, such as Mr. Hardy and others should be solicited, and that an effort should be made to effect some early legislation upon this important question.

The PRESIDENT asked Dr. Yandell, of Louisville, Kentucky, if venereal diseases were prevalent in America, and if there was any police registrations.

Dr. YANDELL replied that these diseases were very prevalent; but that there was no provision for preventing them Dr. Sanger had been lately asked to report to Congress, and he believed that there was a bill before Congress this very year to remedy the evil.

Dr. DRYSDALE said that recently a letter from Mr. B. Hill had appeared in the *British Medical Journal*, censuring the practice of some gentlemen, who had acted as medical officers to private brothels. As he thought the subject important he would mention, that two much respected members of the Harveian Committee, Dr. De Meric and Dr. A. Vintras, had given public evidence before the Venereal Diseases' Committee, of which Mr. Skey was president, as to having so inspected some houses of that kind. Now, he could quite understand the views of an eminent surgeon, Mr. Solly, who gave evidence in the Committee, that he thought that venereal diseases were, "intended as a punishment for our sins, and that we should not interfere in the matter." Such views were clear and definite, and belonged to what had been styled the *a priori* school of ethics; but Mr. Hill was apparently in favour of preventing venereal disease, and, yet, he objected to Dr. De Meric for thus preventing it. He (Dr. Drysdale), adopting as he did the utilitarian standard of ethics, must say, that he thought the function of a medical man was to cure and prevent disease, and certainly as long as Government so utterly neglected their part in this question, as in this country and America, he thought it rather meritorious than blameable in individuals to supply voluntarily the omission. As to questions of receiving emolument, that was merely an accident in medical questions. The primary question was to get work done; and, of course, it was not so likely to be done efficiently by gentlemen of independent incomes, as by those who were paid for the work done.

Dr. CHAPMAN thought that the views held by Mr. Solly and Mr. Hill were opposed to all prevention of any disease which persons brought on by carelessness and bad habits, and was of the ascetic or puritanical school of arguments. Utility or the greatest happiness principle required the prevention and cure of all diseases as such.

Dr. STUART, of Woolwich, said that several articles had already appeared in the local Woolwich papers censuring the examination of prostitutes, and objecting to thier being brought into a decent street, like that in which he resided. The girls, too, sometimes pretended to be menstruating, in order to avoid examination, although they were notin that state.

THE ST. ANDREWS GRADUATES' ASSOCIATION.

This body has been formally reconstituted after having been for some time in abeyance. The immediate cause of its sudden revival is the injustice with which the Medical Graduates of this ancient University are threatened by the new Scotch Reform Bill, and on which we have commented in our leading columns. As soon as the bill was printed, and the design of its framers became manifest, those who had been active in the old Association of St. Andrews Graduates, felt that the time for renewed effort had arrived. A meeting was called last Wednesday afternoon, at the house of Dr. Richardson, to consider whether any, and if so, what steps should be taken in the matter—the result being the reconstitution, with an enlarged basis of the old St. Andrews Graduates' Association, as will be seen from the subjoined report of the proceedings:—

Dr. Richardson having been called to the chair, said that he and some other friends had called the meeting because they felt that the University was in danger of losing both its prestige and its rights, and that a great insult was offered to its medical graduates. He observed that the old St. Andrews Association had taken very active steps in the matter of Medical Reform, and partly through its exertions was to be attributed the fact that the University still enjoyed certain privileges. He gave a history of its efforts respecting Mr. Headlam's bill, then as to Mr. Cowper's, afterwards of the "Medical Act," which became law, and finally of its having succeeded in enforcing the rights of these graduates to office under the Poor-law. Since then the Association had not met. It has, in fact, been dormant, but he felt the time had come to resuscitate it. He would name that, so far as he could make out, there were about 3000 Medical Graduates of the University practising at the present time. These men had paid to Government about £45,000 for stamp-duty alone. But the Government Bill proposes to deprive them all of the franchise, except those who have passed since 1863, and which he believed would not exceed 36 in number. All these men had passed severe examinations before receiving their degrees; many of them held other diplomas, and there was not a shadow of reason for depriving them of their just rights. For his part he would be glad to see a deputation at once wait upon one of the Ministers, and place the simple facts before him. He had no doubt, whatever, that the public would recognise the claims of the graduates. He would, therefore, call upon those who were prepared to propose distinct resolutions.

The utmost unanimity prevailed in the meeting, so that it is unnecessary to report the speeches made, each of which offered some practical suggestions. The resolutions were carried unanimously, as follows:—

Dr. Rogers proposed, Dr. Prosser James seconded—"That an Association to be called the 'St. Andrews Graduates' Association,' be constituted."

Dr. Collinson spoke.

Carried unanimously.

Dr. Drysdale proposed, Dr. Dudfield seconded—"That Dr. Richardson be president; Dr. Paul, hon. treasurer; Dr. Sedgwick, hon. secretary."

Professor Macdonald and Dr. Griffith spoke.

Dr. Wynn Williams proposed, Dr. Griffith seconded—"That all graduates of the University of St. Andrews be admitted to the Association on forwarding their names to the Hon. Secretary, Dr. Sedgwick, 2, Gloucester-terrace, Hyde Park, W., and on payment of 5s. annually for expenses."

Professor Macdonald and Dr. Rogers spoke.

Dr. Ballard proposed, Dr. Paul seconded—"That this Association use every endeavour to secure the enfranchisement of all Medical Graduates of the University of St. Andrews."

"That a deputation be formed to wait upon the Chancellor of the Exchequer to represent to him the views of the Graduates, and of their claims to full enfranchisement."—Proposed by Dr. D. Davies, seconded by Dr. Powell.

Dr. Rogers proposed, Dr. Dudfield seconded—"That advertisements be inserted in the medical periodicals, announcing briefly the constitution of the Association, and that a circular letter to the same effect be sent to all the Medical Graduates of the University in the United Kingdom."

Letters of approval, &c., read from Dr. Greenhalgh, Dr. Tanner, Dr. Theselton Dyer, Dr. Whitmore, and others.

The following graduates were present at the meeting:—Drs. Ballard, Richardson, Wynn Williams, Ray, J Rogers, Drysdale, Prosser James, Macdonald, Powell, Dudfield, Collinson, David Davies, Paul, Sedgwick, Griffith, Seaton, and Day Goss.

Since the meeting, a letter has been sent to the graduates, according to the resolution, from which we extract the following:—

"On previous occasions it has been found necessary to arrange for meetings of the graduates in London to consider matters materially affecting the status of the University, and those meetings have been of much service. On the present occasion the same necessity for action has arisen, owing to the provisions of the new Scotch Reform Act. In this Bill it is provided that there shall be one representative in Parliament for the conjoined Universities of Edinburgh and St. Andrews; but by clause 30, no doctors of medicine except those 'on whom that degree has been conferred *subsequent* to January 1, 1863,' and those in previous years who have attended *in the University* 'two or more classes qualifying for such Degree,' are entitled to vote in the election of a Member of Parliament for the Universities. The clause, as it virtually excludes the whole body of Medical Graduates of St. Andrews from the franchise, is too obviously unjust to be allowed to pass without opposition, and the Association has for its primary and immediate object the establishment of the rights of all graduates who have undergone an examination for their degrees."

We believe that the Aberdeen graduates are about to adopt a similar course, and it was intimated by several at the meeting that in this case the St. Andrews Association would cordially co-operate in any measure for the common good. We may add that the Association intends to compile a list of St. Andrews graduates, showing what appointments they hold, or have held, and what other qualifications they possess. We should therefore urge upon all at once to join the Association, and while remitting the small subscription to the Secretary to furnish him with these particulars corrected to date.

THE INSTITUTION OF CIVIL ENGINEERS,

May 21, 1867.

John Fowler, Esq., President, in the chair.

The paper read, in abstract, was "Experiments on the Removal of Organic and Inorganic Substances in Water," by Edward Byrne, M. Inst. C.E.

It was premised that the object of these experiments was to try how far the statements generally made, with regard to the action of charcoal in purifying water, might be depended on. They were not undertaken to support any theory, but rather to satisfy the Author himself, who observed every precaution to obtain trustworthy results.

It was stated that many substances were spoken of as having a purifying effect on water, but of all, charcoal (especially animal charcoal) had been considered the most efficacious. Though in works which treated on spring and river waters, the assertion was constantly made, that both vegetable and animal charcoal (particularly the latter) removed the organic and inorganic substances found in waters, yet no experiments were given by which to judge to what extent these statements were true. With a view to ascertain whether water, uncontaminated by either decomposing animal or sewage matter, but containing dissolved vegetable matter, would contain any nitrogenous bodies, some bog water was procured from a locality that precluded the possibility of its containing any animal or sewage matter, the experiments on which served to prove that, in bog water at least, vegetable nitrogenous matter was present.

After some observations to the effect that nitrogenous organic matter might exist in water in an innocuous state, and that as putrefactive nitrogenous matter was the most hurtful of all substances that could exist in water, the Author remarked how much it was to be regretted that, by chemical means, no distinction could be made between the nitrogenous organic matter which existed in a putrefactive, and that which existed in a non-putrefactive state.

The details of four sets of experiments were given, the first on animal charcoal, of which nearly 5 lbs., new, and freshly burned, and of the degree of fineness used in sugar refineries, were packed in an ordinary stoneware filter. The water employed (of which a complete analysis was given) contained, in the gallon, organic matter, 10·80 grains; inorganic matters 88·30 grains. The hardness of the water, before boiling, was found to be 50·50°, and after boiling, 33°; and the oxygen required to oxidize the organic matter contained in one gallon, amounted to 0·0116 grain. Several gallons of the water were

allowed to percolate slowly through this charcoal, and upon examination, afterwards, it was found that, of the inorganic matter which had originally existed, 52·60 grains were removed from the first gallon; but from each succeeding gallon less and less; so that, from the twelfth gallon of water that passed through the charcoal only 8·80 grains of inorganic matter were removed. Of the organic matter 4·80 grains were removed from the first gallon; but, with a gradual decrease, the charcoal ceased to remove any organic matter after the sixth gallon. In fact, immediately afterwards, it commenced to give back a portion of the organic matter removed in the first instance, the quantity returned to the twelfth gallon amounting to 1·55 grain. Thus, of the 13·54 grains of organic matter removed by the charcoal from the first six gallons of water, as much as 4·98 grains were given back to the next six gallons; from which the Author concluded that, had this set of experiments been carried a little farther, all the organic matter removed at first by the charcoal would have been given back again.

The second and third series of experiments were with wood and peat charcoal, which, however, were still less satisfactory than those with animal charcoal. The fourth set of experiments was on animal charcoal, with water previously treated with permanganate of potash slightly in excess. After remarking that the water, in its passage through the charcoal was found to contain organic matter, apparently in the same quantity as before treating it with the permanganate, attention was drawn to a comparison between the first and fourth sets of experiments, to show how closely they agreed to contradict the general statements made as to the removing power of charcoal, and to demonstrate how very little indeed could be done by this filtering material, even on a small scale, towards the purification of water.

The author then said that as the epidemic which had so recently left these shores might return again before the adoption of any scheme to supply the Metropolis with an abundance of pure water, he thought it would be well, if only to check its ravages in ever so slight a degree, to experiment on various materials which were believed to possess the power of removing organic matter; but, to obviate false conclusions, and to render such experiments practically useful, they must be systematic.

In conclusion, he gave it as his opinion that, as by chemical agency bad water could be purified to a very limited extent only, the public mind should more than ever be given to the great question of supply; and, as people valued their lives, they should above all things, in their choice of a source, not be too much influenced by distance, but be willing to undergo the necessary expense of securing the object of their search, not only in abundance, but in the greatest purity.

Hospital Reports.

ST. BARTHOLOMEW'S HOSPITAL.

ACUTE SUPPURATION IN THE KNEE-JOINT AFTER A PUNCTURED WOUND: FREE INCISION: RECOVERY.

Under the care of Mr. COOTE.

March 20, 1867.—Jane T., æt. 14, a slightly-made girl, was sweeping a cocoa-nut matting on her knees, when a pin was pressed out, which ran into the right knee, and caused her to start with pain. She pulled the pin from the limb, where it had penetrated the greater part of its length over the situation of the synovial membrane. The day following she had a great deal of kneeling work, when she first found the joint somewhat stiff and painful. She applied a poultice on the same night, but continued her work the day following, the pain becoming more severe, until she was unable to continue her occupation, and finally came to the hospital, where she was admitted April 1.

The whole limb was greatly swollen, and there was extensive suppuration round the knee-joint. The synovial cavity was full of fluid, which Mr. Coote pronounced in all probability to be pus. Free incisions were made to let out the matter formed external to the synovial cavity. A large poultice was applied to the limb. She was ordered mutton-broth; four ounces of wine daily; arrowroot; and a draught composed of ammonia, chloric. æther, and tinct. of icnchona, three times a day.

April 2.—The relief afforded by the incisions is only partial; the countenance is expressive of much suffering; she has no appetite, nor can she rest at night. Opium was administered at night, and the wine was increased in quantity, but the symptoms generally became more severe; and on the 14th it was found that the swelling was of firmer consistence, and was rapidly extending up the thigh. Mr. Coote made a free incision into the synovial cavity, the whole length of the joint, when there escaped nearly twelve ounces of thick, well-formed matter. The operation was performed while the girl was under the influence of chloroform, so that she suffered no pain.

From that time to the present, the pain and swelling have gradually subsided, and she is now convalescent, the wound having, in great part, closed by granulation and cicatrism. The limb is in very good position, and she has gained flesh, and is in usual spirits.

May 30.—Convalescent.

This case illustrates the serious consequences which may ensue from a penetrating wound of joint. As has been observed by the late Mr. Hay, patients rarely recover without the suffering caused by this formation of pus. It was estimated by the size of the wound that full forty ounces of pus were evacuated by the various incisions in this case.

The relief afforded by the incision into the joint was here almost immediate, but the danger of such a proceeding was strongly pointed out by Mr. Coote. It is only in cases where the tension is very great, and the danger of the extension of the suppuration upwards is immediate, that the operation is justifiable, and then the incision must be free, so as to offer a free outlet to the contained matter.

MATER MISERICORDIÆ HOSPITAL.

CLINICAL REPORTS BY DR. HAYDEN.

ACUTE RHEUMATISM WITH PERICARDITIS; ALKALINE TREATMENT; RECOVERY.

Patrick M., aged 31, a corn porter, was admitted into hospital November 12, 1866. A fortnight previously he was hard worked in loading corn; perspired copiously, and, during the intervals of rest, neglected to put on his coat, and became chilled. On the following day he had a slight rigor, and pains in the shoulders, but continued to work till Wednesday, November 7, when he was obliged to keep his bed, and on the 8th he had pains in the wrists and ankles. On admission the tongue was loaded; pulse 102, full and regular; pain in wrists and ankles, the latter being slightly swollen; he perspired freely, and had a severe cough with mucous expectoration. Ordered a mixture containing wine of the seeds of colchicum, tincture of opium, nit. spirit of ether, and liquor potass; also an expectorant mixture.

From the date of admission (12th), till the 20th, no noteworthy change took place; the pulse varying from 102 to 120; the urine being acid, and loaded with lithates.

On the 20th a well-pronounced friction-sound was heard over the base of the heart; pulse 102; respiration 22. Three leeches were applied over mid-sternum, and subsequently a warm poultice; and a mixture was given consisting of liquor ant. tart., ℥ii.; tinct. opii, ℥i.; acetat potassæ, ℥ii.; Syrupi Croci, ℥ii.; aquæ camphoræ ad ℨviii.; an ounce to be given every third hour.

On the 22nd, the pulse was 114, full, but soft and vacillating; a slight frottement was heard over left base of heart at the end of expiration; loud bronchitic râles audible all over front of chest.

A large blister was applied over the heart, and the following mixture was given—viz.:—Potassæ nitrat., ℥ii.; ammon. sesque carb., ℥i.; liquor potassæ, spirit ether nit. aa. ℥ii.; aquæ camphoratæ ad ℨviii.; st. ℨss. 2nd quaque hora.

On the following day (23rd) the urine was slightly alkaline, and on the 24th the pulse had fallen to 102, and was full and regular; tongue cleaning; slight friction still audible over left base; urine highly alkaline, and effervesced briskly on the addition of nitric acid; specific gravity 1025, free from albumen.

25th.—Patient quite free from pain; pulse 102, strong and regular; tongue perfectly clean.

26th.—Pulse 108; two distinct "rubs" are audible over the base of the heart at the acme of inspiration.

27th.—Friction audible over base of heart; it precedes the first sound, and is loudest during inspiration. No further change occurred till the 30th, when a distinct frottement was heard during inspiration only, preceding the first sound, and propagated a short distance in the course of the aorta. The patient was allowed to be out of bed to-day, and has been taking, up to this date, the alkaline mixture prescribed on the 22nd: this was stopped, and quinine was given in gr. ii. doses, three times daily.

On the 4th December a friction murmur was heard during the second sound over the left margin of the sternum, at the level of the third intercostal space, but not propagated farther in the course of the pulmonary artery.

On the 8th no friction sound was audible; on the 10th the patient had greatly improved in strength and appearance; and on the 15th he left hospital quite restored to health.

In this case the signs of pericarditis were not developed till seven days after the date of the man's first illness, and, during the period of its continuance, the friction sound varied in a remarkable degree both in site and in rhythm.

It was usually audible only at the acme of inspiration—a circumstance which I regard as evidence of its pericardial origin, and auricular site, and am disposed to attribute to the state of distension of the auricles consequent upon the influx of blood from the venæ cavæ during inspiration.

In regard to the action of the heart, the murmur immediately preceded the first sound, and might, therefore, be possibly confounded with the præ-systolic murmur of mitral constriction; but from this it was distinguishable by its basic site, and by its being audible *only* during inspiration.

The beneficial action of alkalies, given till the urine became alkaline, is forcibly illustrated in this case. The alkaline diuretic mixture was prescribed on the 22nd, the urine being then highly acid; pulse 114, vacillating. On the following day the reaction of the urine was slightly alkaline; and on the 24th, when it was reported as highly alkaline, and effervescing on the addition of nitric acid, the pulse had fallen to 102, and was full and steady; the tongue cleaning from the edges; and on the 26th the patient was quite free from pain.

ACUTE RHEUMATISM WITH IRREGULAR AND INTERMITTING ACTION OF THE HEART; TREATMENT BY ALKALIES; RECOVERY.

Patrick R., aged 22, draper's assistant, admitted 23d of November, 1866. Previous health good. For the last few months had been constantly exposed to a draught in the shop in which he did business, and about ten days previously caught a severe cold, followed by cough. On admission his tongue was coated and white; pulse 106, regular, and full. He complained of great pain in the joints of the right side of the body, the ankle and knee being much swollen. The left wrist and ankle were likewise painful, but not swollen. No abnormal cardiac sign, with exception of an occasional reduplication of the second sound. The urine was acid. The alkaline mixture given in the preceding case was prescribed, as likewise an expectorant mixture.

On the 25th there was a remarkable rhythmical irregularity of the heart and pulse, *i.e.*, the action became accelerated after every fifth beat. The patient was constantly sighing, and appeared slightly incoherent. Urine still acid; 1030 s. g., and free from albumen. Skin dry. To have ʒiv. of wine daily.

26th. Urine neutral, and high coloured; pulse 96, feeble, and irregular. Patient very uneasy, and complaining of severe pain in the joints. At six P.M. the alkaline mixture was discontinued, in consequence of the occurrence of diarrhœa, which was promptly arrested by the use of the acid astringent mixture (dilute sulphuric acid and tincture of opium). Alkaline mixture resumed.

27th. Patient feels and appears much better; pulse 90, and regular; heart's action also regular, and more vigorous than previously; there is copious perspiration, and the urine is neutral.

28th. Patient was delirious last night; pulse 84, regular; urine alkaline; perspiration arrested. To have mixture only every fourth hour. From the above date till Dec. 3, the pulse ranged from 96 to 102, and on that day the tongue had become clean, and the pulse was 96 and strong. Lemon juice was now substituted for the alkalies.

On the 10th the patient was allowed to sit up, and on the 13th gr. ii. of quinine with m. x. of liquor of the pernitrate of iron were given instead of the lemon juice, three times daily.

20th. Patient now takes walking exercise in the corridor. Urine faintly alkaline; pulse 102 in erect, and 84 in sitting posture, but irregular in both. The action of the heart is now peculiar, as exhibiting rhythmical irregularity, intermittence, and suppression of the first sound. Thus, there are four beats in quick succession, and at equal intervals, during which no first sound is heard; these are succeeded by a long interval, a single beat, and an equally long interval, in the order in which they are mentioned; and during this single beat the first sound is distinctly heard. The above-mentioned series of phenomena is then repeated without any variation, except that occasionally there are only three in place of four rapidly consecutive beats.

22nd. The pulse was 90, regular, and of moderately good volume. No first sound was audible at the apex, but at the base a first sound was faintly heard. Urine acid; specific gravity, 1030; free from albumen.

24th. Pulse 96 and occasionally intermitting; first sound of heart distinctly audible at apex; tongue clean; appetite good. Discharged.

The preceding case exhibits a state of the heart in rheumatism similar to that occasionally witnessed in typhus fever, in regard to the suppression of the first sound. This phenomenon is of rare occurrence in rheumatism, and is probably due to the action on the heart of the morbid poison (lactic acid?) of that disease. The remarkable irregularity of the heart's action, which I would designate as *rhythmical*, because occurring at regular and equal intervals, constitutes another interesting feature in this case. This form of irregularity I believe to be peculiar to *neuroses* of the heart, as distinguished from organic disease.

The favourable change in the general condition of the patient, and in the individual symptoms, coincident with the change in the reaction of the urine under the use of alkalies, is likewise of practical interest.

Reviews.

BODY AND MIND: the Nervous System and its Derangements. By GEORGE YEATES HUNTER. London: John Churchill and Sons.

OUR first impressions, from the outside appearance of this little book, was not favourable. We feared from its external resemblance to some of the domestic medicine books, that it was of the same order. We have, however, conscientiously read every line, and most readily assure our readers that it contains nothing objectionable. Its title, indeed, is vague and inexact. There is very little about the mind in it, but there is plenty of good advice about the care of the body, and that in a very readable form. The book is of course addressed to the public, and as such will not be expected to contain anything new to the profession. It may be fairly divided into two parts; the first devoted to the preservation of health, and the

second to a consideration of certain derangements, which the author considers most productive of nervous diseases.

It is the first portion of the book that we think the more successful, consisting as it does of a series of plain and practical observations and directions on education, diet, exercise, clothing, bathing, sleep, residence, ventilation, change of air, and some often forgotten avoidable causes of nervous ailments, such as the cares of business, speculations, mental labour, and anxiety, the abuse of alcohol and tobacco, as well as certain mental stimulants, such as sensational reading and religious excitement. The observations on each of these subjects are pithy and pointed; and the book, had it been confined to this subject, which is complete in itself, might even have been extended with advantage. The second portion is perhaps as fairly done as could be expected. It makes no attempt to enable every one to be his own doctor, but is confined strictly to such particulars as a patient may, without prejudice, consider. It may indeed be questioned whether there is any advantage in an invalid looking over a description of disorders of the several viscera; and we do not altogether like such subjects as hysteria and uterine derangements to be read about by females. They are better entirely let alone, and, in our opinion, if these chapters were excised, the book might, with advantage, be placed in the hands of almost any one. We cannot, therefore, do other than congratulate the author on having produced a neat work of moderate compass for popular use, free from every vestige of quackery.

It is so difficult to write for the public on professional topics that, with so much in its favour, it would be ungenerous to point to the defects of the work. The author modestly excuses his style. There was no need for apology. We have no sympathy with that class of critics which would reduce every book by a professional man to the most unreadable form. The best style is as suitable for scientific writers as for those who confine themselves to literature proper. A judicious use of the pruning-knife will enable the author of the book before us to write with a certainty of being read, and this is perhaps as much as he could expect to have achieved in his first attempt.

LIGHT: its Influence on Life and Health. By Forbes Winslow, M.D., D.C.L. London: Longmans.

Our first impressions on taking up this handsome little volume were of a very conflicting character. In the first place it is so elegant in its appearance, its type so clear, and its size so handy, that it seemed to promise that reading its 300 pages would be a most agreeable after-dinner occupation of an hour or two, and the name of the author was sufficient guarantee that the perusal would be pleasant enough. Had the publisher saved us the trouble of cutting the leaves, it would have been an extra advantage, since the volume only needs the attractions of bevilled or gilt edges to make it suggestive of the drawing-room table. It always seems odd to us that, when publishers bestow so much expense on bringing out a work, they should not invariably prevent the slight disfigurement which results from cutting open.

On the other hand, the reflection would intrude upon us that, with this small 8vo page, and double-leaded type, there could scarcely be so much of Dr. Winslow's thoughts in the book, as we should like to have the pleasure of reading.

We have read the book through, and may candidly confess we have not got rid of our conflicting ideas about it. We find the perusal, as we expected, pleasant recreation. Dr. Forbes Winslow is necessarily readable, and has here thrown together, with the art of a practised writer, a large amount of learning and numerous facts bearing upon his subject. Yet, as if to verify our presentiment, we find less of his own thoughts than might have been expected. He gives so fully other men's views, and quotes them so liberally, that he seems to have no space left for his own conclusions, and, in some instances, we really feel, after all, that he has, while writing on *light*, left us in the *dark* as to his own opinions. Having ventured on this statement, we may be expected to confirm it by an example. We will therefore select one, not because it is the most prominent, but because it relates to a point on which we should naturally have anticipated something decisive from the nature of the author's extensive experience. The third chapter is on "the alleged influence of the moon on the insane," and occupies thirty-five pages. Yet, the only expression of the author's own views on this most interesting subject is contained in a paragraph of nine lines, and which we will therefore quote:—

"If I were to confine the concluding remarks to the result of my own observations on this subject, I fear I should be able to add but little to what others have written in relation to it. I freely admit that, placing but little faith in what has been recorded or said on the subject, I have not kept any systematic register as to the effect of different phases of the moon on the insane."

We freely admit that the reason assigned for having little to say is a good one, but we trust the author will appreciate our disappointment when we thus readily express ourselves as preferring his own ideas to the most excellent *resumé* of those of others. Men of inferior mould, and less opportunity, may be safely left to anything approaching the work of compiling, and we should therefore be better pleased to receive from Dr. Winslow his own thoughts, than the most careful and discriminating epitome of the literature of his subject. Although the form of words we have employed may almost seem a complaint, they are, nevertheless, those of praise, since we are, in effect, asserting that what we might commend as valuable in another, does not, in our opinion, come up to the full standard of Dr. Forbes Winslow himself.

His previous works have set up the standard, and we feel sure he will be rather pleased than otherwise that we should measure this by it.

In another aspect, however, the book is deserving of success. It is written for the general public, and, as such, is one of the best books that can be widely circulated. A full and able summary of the sanatory and physiological influence of light; written in a fluent style; containing the opinions of ancient as well as modern philosophers, classified with learning and accumen; it constitutes a really valuable contribution to the literature of the day, and should be read by every one who is willing to devote an evening to so intellectual a recreation.

That the scientific teaching is fully brought down to the latest standard would, of course, be expected; and this, on careful perusal, we have found to be the case. Dr. Winslow has pressed into his service the most recent investigations, by means of the spectrum, and shows that he is quite *au courant* with the last speculations respecting the metallic vapours found in the atmosphere of the sun, and their possible connection with the hygienic influence of sun-light.

What a difference there would be in this class of literature if other authors were equally well-informed. We trust a few of those who aspire to impart scientific knowledge to the public will take the hint. Let them take Dr. Winslow's book as their guide, and they will not confine their attention to doctrines that have been exploded a dozen years.

One of the greatest faults of our popular scientific books is that they are behind the age. Dr. Winslow has set an example which we hope will be followed. He has brought it down to the present date.

CURRENT LITERATURE.

Practical Dissections, by Richard M. Hodges, M.D. Second Edition. Philadelphia: Henry C. Lea. London: Trubner and Co.—This is a small volume which will serve well as a dissecting-room companion. That it was accurately done at first is attested by the few changes required in the second edition. Of course it is not a book to read except as a guide, and the writer of this notice has not read it through. He has, however, compared the plan of the volume with other books on anatomy, and has carefully read the general hints on dissection, which are admirable, and also the whole of the chapter devoted to such anatomy as can be demonstrated without actual dissection. This is founded on an article by Mr. Luther Holden, in St. Bartholomew's Hospital Reports, and we think that eminent anatomist and surgeon will be gratified to find his suggestions thus admirably carried out. Dr. Hodges' book will be a great acquisition to the student. It is brought out in a most portable form; it is, in fact, reduced to the essentials for the dissecting-room, and, as a book to work with, is very properly strongly bound. No plates are introduced, as the student is supposed to have the subject before him. Whatever other manuals of anatomy he may have, we should advise the addition of this inexpensive one to his library. It can be carried in the pocket without inconvenience, and will seem to save his others. Had we our own time to go over again we should certainly make trial of Dr. Hodges' Practical Dissections.

Shaw's Medical Remembrancer.—This favourite pocket-book for emergencies, has reached a fifth edition. It is now edited, and, to a great extent, re-written by Mr. Hutchinson, of the London Hospital—a sufficient guarantee for its accuracy. Among the new matter introduced into this edition, we may mention the articles on injuries to the head and spine. The alphabetical arrangement certainly is most convenient for reference.

In the form of an *Appendix* to its 18th Annual Report the *Prudential Life Office* has issued a volume of tables of vital statistics, which will probably interest those of our Profession who occupy themselves with this subject. If all companies would publish their experience on a uniform plan, we have no doubt that a valuable amount of reliable information would be rapidly accumulated. The tables issued by the PRUDENTIAL are illustrated with coloured diagrams, showing the varying mortality in different districts and periods.

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"SALUS POPULI SUPREMA LEX."

WEDNESDAY, JUNE 12, 1867.

THE PROCEEDINGS OF THE GENERAL MEDICAL COUNCIL.

A RETROSPECT.

IF the space to which our medical contemporaries allocate to the proceedings of our much abused Medical Parliament, be an index of the interest with which they are regarded by the Profession, it is manifest that the topics therein discussed, are voted by an immense medical majority of the public, to be worthy of most earnest attention, and that if the Medical Council be inefficient for the reform of the Profession, it is not because there is not plenty of work for them to do, and great incentives to action. If we have had a difficulty in providing our readers with a *resume* of the proceedings, it has been in the effort to stem the tide of irrelevancy and of personal squabbling, which mars the usefulness of the Council and the dignity of its Members, and to extricate the fly from the pot of oratorical ointment.

The Session opened on Wednesday the 29th of May, and the meeting once more took place in the spacious and convenient room, placed at the service of the Council by the College of Physicians. Whilst such premises are available, it is to be hoped the Council will make no attempt to procure a building of their own, which could not possibly add to their convenience or comfort, but would undoubtedly entail a large and unremunerative outlay.

The opening address of the President, Dr. BURROWS, was listened to with profound attention, and furnished a clear statement of the doings of the Council, and its claims to respect. Spoken clearly and incisively, with no attempt at display, it exactly hit the mark, and furnished an admirable introduction to the business of the day. Hardly had the President resumed his seat when the combativeness of the Council was aroused into full energy by a communication from the Home Secretary, respecting the Medical Amendments Act. It will be remembered that last year the draft Bill was forwarded to Sir GEORGE GREY, then Home Secretary, who, in going out of office, transferred it to the care of Mr. WALPOLE. In July last, the Executive Committee of the Council waited on that gentleman, "to press on the Government the expediency of its being adopted as a Government measure, and at the same time to state that the Medical Council are of opinion that unless the Bill be introduced by the Government, it would be unadvisable to proceed with it."

It is almost unnecessary for us to say that the usual diplomatic put-off was dealt out to the Council with the usual implied promise, that something would be done. After six months, the Council were informed, through their President, that the Home Secretary was busy, and they had better take their Bill elsewhere. This suggestion being contrary to the express determination of the Council, could not be adopted; and in May, Mr. WALPOLE was again dunned into a promise of settling the little account shortly. The settlement was now presented to the Council, and it may be paraphrased in tone and substance as follows:—"The delay is all your own fault, because you were naughty, and would not vote what you were bid. If you are good boys and will swallow what your Papa desires, he will not whip you and put you in the corner. In any case you must not teaze him any longer, but get 'some independent member' to mend your toy, and if you can get any one, Papa will give him leave to do so. But you must not be selfish, and must let in and play with any quack whom your dear Papa, or any of his friends, may desire."

In other words, after nine months of culpable disregard and carelessness for the public interest, Mr. WALPOLE promises that if the Council will consent to accept "any Colonial or Foreign Degree, Licence, or Diploma" which "any of her Majesty's Secretaries of State" may think worthy, he (Mr. WALPOLE) "does not think the Government would offer any opposition to the Bill," but it would be well for the Council to entrust the Bill to some independent member.

Just indignation was naturally expressed at the

MEETING OF THE GENERAL MEDICAL COUNCIL OF EDUCATION AND REGISTRATION.

(Continued from page 567.)

Dr. Alexander Wood thought the holders of Colonial degrees would use an expression which was very common in Scotland : "Thank you for nothing." "We asked of you bread, you give us a stone." He thought there was very little liberality in this—the liberality that had been so much boasted of. The motion of Dr. Paget was a well considered scheme to meet the difficulties that had arisen, which, if it were carried, would place the Council in exactly the same position it stood prior to the passing of the last Medical Act. It enabled them to do for men with foreign and colonial degrees received subsequent to the year 1858, what it did for those before the passing of the Act in that year. He begged to support the motion, as he considered it an admirable solution of a very difficult question.

Mr. Syme was of the same opinion.

Dr. Risdon Bennett thought it extremely desirable. there should be a distinction, as suggested by Sir D. Corrigan. If those possessing colonial and foreign diplomas were to be admitted to the same position as our own—and the Government insisted that it should be done—the question was, how were they to do it, and what was the best plan of going about it. The Government had said, you *must* have a door for the admission of these men. He thought, therefore, that they should show the Government the reasonableness of their submitting to a certain examination prior to admission. Although he could not see the utility of the amendment of Sir D. Corrigan, he hoped Dr. Paget would be induced to slightly modify his proposition that the distinction between the two diplomas might be more marked. He should have great pleasure in voting for its adoption.

Dr. Fleming quite agreed with the remarks that had fallen from Sir Dominic Corrigan. He thought it was absolutely necessary there should be a distinction between foreign and colonial diplomas, those from America especially were heaped upon them indiscriminately. He had been recently on the Continent, and had watched the nature of the examinations there, and he had no hesitation in saying that, compared with those enforced upon our own students at home, they were quite inadequate, and certainly did not fit them to be placed side by side with those who had acquited themselves before the Examining Boards of this country, he would therefore second the amendment.

The President suggested that before proceeding with the motion under discussion the Council should know exactly in what position they were placed with the government. At the interview he had sometime since with Sir George Gray, the right hon. gentleman intimated that the government would not consent to pass the "Medical Act," unless some clause were inserted, for the admission of foreign and colonial diplomas. He did not know what the answer of the present government would be on the point, but he had reason to believe that Lord Derby would not consent to a distinction being made.

Dr. Andrew Wood said the Council must recollect that they were pledged to the government that a clause should be introduced for the admission of these diplomas; aye, and pledged to the introduction, even though it were without any examination whatever. This being the case, he thought the present clause a great improvement upon that of last year, and he hoped the Council would adopt it. Mr. Walpole's proposition was quite inadmissible. He hoped the present Home Secretary, Mr. Hardy, would see this ; if he did not, then he would suggest that the Council throw the onus of passing any measure on the Government, and refuse to have anything more to do with the matter.

Dr. Paget said that as the objections taken by some members to the motion brought forward by him had been answered by subsequent speakers, he need not trouble the Council with a reply. He thought a clause for the separation of colonial and foreign diplomas was provided in the motion now before them.

The amendment of Sir Dominic, seconded by Dr. Fleming, was then put from the Chair, and negatived, and the motion of Dr. Paget agreed to by a large majority.

The following motion by Dr. Acland was withdrawn by consent of the Council, to a future occasion :—

"Suggestions for Enabling Clauses in a New Medical Act.

"1st. That it is desirable to obtain the following additional powers under the Medical Act, with respect to examinations, viz. :

"Whereas there are now in the United Kingdom, nineteen Licensing Bodies, having power to confer thirty separate Licences and fifty-three different Titles, and whereas it was the intention of the Medical Act to produce a uniform and sufficient standard in the Examinations conducted by the said Licensing Bodies, and whereas the power of combining the examinations of the said Licensing Bodies under Clause XIX. of the Medical Act has been sparingly used ; whereas the visitation of the Examinations of so many Bodies by different Visitors is a cumbrous form of procedure, and one ill calculated to produce the uniformity sought for, and that further concentration of the Examinations will tend to the accomplishment of that object.

"2nd. That in order to encourage the study of Hygiene and 'State Medicine,' it is desirable that the Council shall, in combination with any of the Licensing Bodies, have power to institute Examinations in Hygiene and 'State Medicine,' and to give Certificates of competency therein, and that these certificates may be entered upon the General Register, as an additional Qualification or Title of registered persons.

"3rd. That whereas it is the duty of the Medical Council to republish, *alter, and amend* the *British Pharmacopœia*, lately published (Clause 54, Medical Act), and the Council have resolved that they do not consider that they have power under the Medical Act to expend any funds in enquiring into the utility of articles introduced into the *Pharmacopœia*, but only how to prepare such articles ; *it is desirable* that the Council shall have power to expend such sums as it may see fit from time to time, with the approval of the Treasury, on investigations calculated to perfect the knowledge and to test the utility of articles of reputed or probable value, whether recently discovered or otherwise, with a view to including them in, or rejecting them from, future editions of the *British Pharmacopœia*.

The following report from the Committee on Mr. Richard Organ's application was read and passed:—

"The Committee, having examined the documents accompanying the application of Mr. Richard Organ, and having taken into consideration the circumstances of Mr. Organ's original offence, his subsequent course of defence, and the careful decision of the Council on a similar petition, arrived at last year after full deliberation,—Recommend that the Council decline to entertain Mr. Organ's application.

"(Signed) Allen Thompson, *Chairman*."

The Executive Committee for the ensuing year, was then constituted on vote by ballot as follows:—

The President ; Dr. Paget, 22 ; Mr. Cæsar Hawkins, 21 ; Dr. A. Smith, 21 ; Dr. Sharpey, 21 ; Dr. Andrew Wood, 20 ; Dr. Acland, 13.

Thursday, June 6.

After the minutes of the preceding day had been read and confirmed, the President said before proceeding with the business of the day, he had to inform them that the deputation appointed on the previous day to wait upon Her Majesty's Government relative to the proposed clause

in the New Medical Act, had had that morning an interview with the Right Hon. Gathorne Hardy, by whom they had been very courteously received, and the remarks which he (the President) made, supplemented by those which fell from some members of the deputation, had been listened to with marked attention. Mr. Hardy entered into the subject very fully, stating that he well remembered the circumstances connected with the passing of the Medical Act in 1858, and although in the present stage of government buisness he did not feel himself in a position to promise the immediate introduction of the bill before parliament, he, nevertheless, would take the earliest opportunity of conferring with the late Home Secretary, Mr. Walpole, who was perfectly conversant with the subject, and he would then put himself in communication with the council.

Professor CHRISTISON said that as the matter, at least so far as the council were concerned, was at an end, to prevent the time of the council for the future being unnecessarily taken up he would propose

"That it be delegated to the Executive Committee to resume its conferences with the government, with regard to the bill for the amendment of the Medical Act as now adjusted by the council, and to take such steps as they may think advisable towards carrying the bill through the legislature in the same manner as the Medical Act itself." This proposal was seconded, and carried *nem. con.*

It was proposed by Sir DOMINIC CORRIGAN, seconded by Dr. STOKES, and passed:—

"That the returns from the Directors General of the Army and Navy Medical Departments be placed on the minutes, and that the thanks of the council be given for them."

THE FOLLOWING TABLE, COMPILED FROM THE RETURNS FOR THE EXAMINATIONS IN MARCH AND AUGUST, 1866, AND FEBRUARY, 1867, GIVES THE GROSS RESULT:—

Name of Licensing Body.	No. of Qualifications.			Deficient in.				Percentage of Failures to Qualification.
	Total.	Number Passed.	Number Failed.	Anatomy.	Surgery.	Medicine.	All Subjects.	
College of Physicians, London..	1	1	0	0	0	0	0	0
" " Edinr.....	26	17	9	5	5	1	3	34·6
" " Dublin....	30	21	9	3	2	2	5	30·0
College of Surgeons, London....	19	15	4	2	0	0	2	21·05
" " Edinburgh	16	9	7	5	4	0	2	43·7
" " Dublin.....	49	36	13	3	6	5	5	26·5
University of Edinburgh, M.D.	3	1	2	1	1	0	0	66·6
" Dublin, M.B.	17	14	3	1	2	1	0	17·6
" " M.C.....	11	9	2	1	0	1	0	18·1
" Aberdeen, M.B...	1	1	0	0	0	0	0	0·
" " M.C. ..	1	1	0	0	0	0	0	0·
Queen's University, M.D.	11	9	2	1	1	2	0	18·1
" " M.C.....	3	3	0	0	0	0	0	0·0
Faculty of Physicians, Glasgow	2	1	1	2	1	0	0	50·0
Apothecaries, London	13	10	3	2	1	0	0	23·1
" Dublin.....	4	3	1	1	1	0	0	25·0
	207	151	56					

Number of Candidates successful, 73; unsuccessful, 27; total, 100.

LETTER FROM THE DIRECTORS GENERAL OF THE NAVAL MEDICAL DEPARTMENT.

"Admiralty, W.C. 30th March, 1867.

"SIR,—We have the honour to acquaint you, for the information of the General Council of Medical Education and Registration, that during the year 1866 nineteen candidates presented themselves for examination for Medical Commissions in Her Majesty's Naval Service.

"1st. Of these, eleven passed more or less satisfactory examinations, and were admitted into the service, and eight were rejected.

"2nd. Three of the eleven who were admitted into the service passed good examinations in all subjects; one who otherwise passed a good examination was somewhat deficient in Latin and Botany; four passed moderately good examinations; and in three the examination passed was indifferent.

"3rd. One Candidate, who passed a good examination in all subjects, had been once previously examined and rejected, and the same observation applies to one who passed a moderately good examination. The candidate who passed a good examination with the exception of Latin and Botany had been twice previously examined and rejected."

"4th. Of those who were rejected three failed in their Classical Examination. One of these, however, was found to be also physically unfit for the service, and one of the others was so ignorant of the Latin language that he declined to attempt to translate, and failed to write an ordinary prescription.

"5th. The remaining five were rejected for ignorance of anatomy and surgery chiefly.

"6th. Appended hereto are lists of the subjects upon which the candidates were orally examined, the questions forming the subjects for their written examination, and a tabular statement, showing the qualifications of the different candidates according to Schedule (A) of the Medical Act, the results of the examinations in each case, and the subjects in which the candidates were most deficient.—We have the honour to be, Sir, your obedient servants,

J. W. SALMON, M.D., *Deputy Inspector-General.*
WM. R. E. SMART, M.D., *Deputy Inspector-General.*
ALEX. E. MACKAY, M.D., *Deputy Inspector-General.*

The following is the text of Dr. Alexander Wood's report on the subject of preliminary education, which opens with this preamble:—

"Your Committee are satisfied that the importance of the subject of General Education, fully warrants the attention which it has received at the hands of the Council from the commencement of its labours until the present time.

"It is obvious that proficiency in medical study must be to a great extent affected by the ability conferred on the medical student by previous mental training, to profit by the lessons of his medical teachers, and that a sufficient general education in literature and science, obtained before the commencement of professional study, will go far to secure the entrance into the profession of men who will do credit to it by possessing such a degree of enlightenment of mind, derived from literary acquirement, as will secure the respect of the educated persons with whom they may be afterwards brought into relation in the course of their professional duties.

"In 1859 the Council agreed to a series of recommendations, which were repeated from year to year with various additions, until in 1866 they were sent out to the various licensing bodies in the subjoined form.

"Your Committee are of opinion that it would be unwise to disturb, this year, recommendations carefully considered by the Council last Session, which have not yet had a sufficient trial, and some of which have not yet come into operation, especially as the visitors of examinations give in most cases a satisfactory report of the manner in which the examinations in general education are conducted, the Committee are, however, of opinion that the time has come when the Council, without going beyond the minimum adopted in 1866, should indicate more precisely how the knowledge possessed by students of the subjects contained in that minimum may be best tested. Further, your Committee are of opinion that the Council should consider how far it might be possible for them, by friendly communication with the national educational bodies, to whom they have repeatedly recommended that general education should be entrusted, to secure some means of visiting their examinations, and of making suggestions in regard to the mode of conducting them of a similar nature to those which have proved beneficial in regard to professional examinations.

"It is very evident, as indeed the reports of the visitors of examinations demonstrate, that the subjects contained

in the minimum laid down by the Council may be variously understood, and the Examinations may be variously conducted by the examining bodies.

"1. For example: 'English language, including grammar and composition,' as recommended in 1866, may be a sufficient test in the hands of one examiner, and insufficient in the hands of another; in fact, the test may be so applied as utterly to fail in preventing the entrance of illiterate persons into the profession.

"Your Committee would recommend that in re-issuing this recommendation notes to the following effect should be appended:—

"The General Medical Council will not consider any examination in English sufficient, that does not fully test the ability of the candidate—

"1st. To write a few sentences in correct English on a given theme, attention being paid to spelling and punctuation as well as to composition. 2nd. To write a portion of an English author to dictation. 3rd. To explain the grammatical construction of one or two sentences. 4th. To point out the grammatical errors in a sentence ungrammatically composed, and to explain their nature. 5th. To give the derivation and definition of a few English words in common use.

"2. ARITHMETIC AND ALGEBRA seem not to need any comment.

"3. GEOMETRY—*First two books of Euclid.*—It is obvious that an examination conducted under this brief instruction is not necessarily efficient, unless the questions be so put as to exclude the deception which may arise from the Candidate answering without real knowledge, merely through the help of a powerful memory and careful 'cramming.' Precautions therefore should be taken against this risk, and to secure that he possesses a real knowledge of the subject.

"4. LATIN.—It is 'perhaps' in Latin, next to English, that the Committee think it necessary that the Council should recommend what would, in their opinion, constitute a satisfactory examination. Your Committee would suggest—

"1st. That the candidate, with the aid of a dictionary if required, should be required to translate three or four sentences from an easy author, not having been informed beforehand from what author the sentences will be selected. 2nd. That he should be required to translate easy sentences from English into Latin, either with the aid of a dictionary or on being furnished with the Latin words, altered in order, number, case, mood, and tense. 3rd. That he should be required to parse a Latin sentence, so as to show his acquaintance with the Latin grammar.

"Your Committee would consider it more satisfactory if the preliminary examination were made in every case to include an oral as well as a written examination. They are well aware that there are great difficulties in the way of such an arrangement, but still they would recommend the Council to encourage it as far as it may be practicable.

"Your Committee are of opinion that the minimum of general education laid down in 1866 will eventually require alteration, but as the Report of the Royal Commission in Scotland very recently published on the school education of that country, and the Report of the English Royal Commission, now in course of preparation, will throw much light on the school education of both countries, the Council will hereafter be enabled to judge more accurately both of the amount and of the kind of knowledge that can be fairly demanded of well-educated youths of 16 or 17 years of age.

"The last subject on which your Committee would touch, is the question by what Boards the Examinations should be conducted. They still adhere to the opinion, early expressed in this Council and never deviated from in former reports on the subject—'That, as far as may be practicable, testimonials of proficiency, granted by the National Educational Bodies, be accepted as sufficient vidence of a student's acquirements in general education, and that the examination on general education be eventually left entirely to the Examining Boards of National Educational Bodies recognized by the Medical Council.'

"Your Committee fear that a too liberal interpretation of this resolution has led to the admission of several bodies on the list whose examinations do not come up even to the minimum which the Council has resolved, in the meantime, to accept. To remedy this defect, your Committee would suggest that the Council should recommend—

"1st. That after 1868, all Examinations be removed from the list of those recognized which do not in all respects come up to the minimum which the Council laid down in 1866.

"2nd. That the various Licensing Boards be recommended to discourage the practice of receiving the Certificates of these bodies on certain Branches, and then supplementing their Examinations by others in the omitted Branches.

"3rd. That examinations in Arts, specially designed for Medical Students, should not in any case imply education inferior to that of Students intended for other professions.

"4th. That all examinations in Arts should be conducted by Examiners specially qualified in Arts.

"5th. That it be remitted to the Branch Councils to consider how the means of Examining Medical Students in General Education can be most easily provided at the several seats of Medical Education under their jurisdiction, and to report on this subject to the Council in 1868.

"6th. That it be remitted to the Branch Councils to visit as far as possible the different Preliminary Examinations held by Educational as well as Licensing Bodies, and to report their opinion of these Examinations to the next Meeting of the General Medical Council.

"Since the foregoing Report was prepared, the Council have instructed the Committee to consider and report on a communication addressed to the Council—

"A recommendation in a Memorial from the County and City of Cork Medical Protective Association to the following effect:—

"'That the course for a Degree in Arts in the different Universities should, in the opinion of your Memorialists, be preliminary to that for a Degree in Medicine, and that a course of education embodying both Classical Studies and the various branches of Physical Science, should be indispensable before entrance on Medical and Surgical Education of whatever character.'

"In regard to that part of the Memorial of the Cork Medical Protective Association, your Committee are of opinion that the Council, having already decided that the Examination on General Education shall be undergone before the Student commences his Medical Studies, and having endeavoured gradually to improve the Preliminary Education, are going, as fast as it is safe to do, in the direction indicated by their Memorialists.

"ALEXANDER WOOD, *Chairman.*"

The Council then entered into a long discussion upon the report, some portions of it being very severely handled—Dr. Andrew Wood, Mr. Rumsey, Sir Dominic Corrigan, Dr. Paget, Dr. Fleming, Dr. Christison, and others—portions of the same being expunged or withdrawn by the consent of the Council, to which the following motions refer:—

Moved by Dr. ALEXANDER WOOD, seconded by Dr. EMBLETON, and agreed to:—

"That in re-issuing the recommendation that 'English Language, including Grammar and Composition,' be one of the subjects of Examination, notes to the following effect should be appended—

"The General Medical Council will not consider any Examination in English sufficient that does not fully test the ability of the Candidate—*1st.* To write a few sentences in correct English on a given theme, attention being paid to spelling and punctuation as well as to composition. *2nd.* To write a portion of an English author

to dictation. *3rd.* To explain the grammatical construction of one or two sentences. *4th.* To point out the grammatical errors in a sentence ungrammatically composed, and to explain their nature. *5th.* To give the derivation and definition of a few English words in common use."

Moved by Dr. ALEX. WOOD, and seconded by Dr. EMBLETON:—

"That in re-issuing the recommendation that 'Latin, including translation and Grammar,' be one of the subjects of Examination, the following notes be appended—

"The Council recommend that in conducting the Latin examination the following rules be observed:—'*1st.* That the candidate, with or without the aid of a dictionary, should be required to translate three or four sentences from an easy author, not having been informed beforehand from what author the sentences will be selected. *2nd.* That he should be required to translate easy sentences from English into Latin, either with the aid of a dictionary, or on being furnished with the Latin words, altered in order, number, case, mood, and tense. *3rd.* That he should be required to parse a Latin sentence, so as to show his acquaintance with Latin grammar."

With permission of the Council, for the foregoing motion the following was substituted—

1. Moved by Dr. ALEX. WOOD, and seconded by Dr. STORRAR:

"That in re-issuing the recommendations of the Council of 1866, to No. 4, viz., 'Latin, including translation and grammar,' the word 'composition' be added."

The motion was negatived.

2. Moved by Dr. ANDREW WOOD; seconded by Dr. PARKES; and agreed to:

"That after 1868, all Examinations be removed from the list of those recognized which do not in all respects come up to the minimum which the Council laid down in 1866."

3. Moved by Mr. SYME; seconded by Dr. STORRAR; and agreed to:

"That the application from the McGill College, to have their Certificates of Preliminary Examinations recognized by the Council, be acceded to."

4. Moved by Dr. PARKES; seconded by Mr. HARGRAVE; and agreed to:

"That an answer be sent to the Cork Medical Protective Association, to the effect that the Council, having already decided that the Examination in General Education shall be undergone before the Student commences his Medical Studies, and having endeavoured gradually to improve the Preliminary Education, are going as fast as it is safe to do in the direction indicated by the Cork Medical Protective Association."

5. Dr. SHARPEY submitted to the Council the following

"REPORT OF THE FINANCE COMMITTEE.

"The Finance Committee beg leave to present, in the table subjoined, a statement of the estimated and actual income and expenditure of the year 1866; also an estimate of the income from ordinary sources, and of the expenditure, as far as the Committee are able to judge, for the year 1867.

"The expenditure of 1866 has exceeded that of 1865 by £513 1s. 5d. This excess is in considerable part due to an increase in the expense for printing the minutes of Council. The increase of charge over that of the previous year, for attendance at the Executive Committee, is £50 16s.

"From the figures in the table it will appear that the actual income of the past year exceeds the estimate by £53 6s. 9d; but, as on the other hand, the actual expenditure is greater than what was estimated, there is a balance of £455 16s. 11d. against the Council.

"As observed in the Report of last year respecting such estimates, it is scarcely possible to judge of the prospective expenditure with any near approach to accuracy, inasmuch as the amount is greatly dependent on the duration of the Sessions of Council, which cannot with certainty be determined beforehand.

"A statement of the receipts and disbursements on account of the 'British Pharmacopœia,' since the date of the account presented last year, and of the balance in the Bank to the credit of the General Council, is given up to January, 1867.

"The Committee also present an account of the expense of preparing and publishing the New Edition of the 'Pharmacopœia,' so far as known or estimated, with an estimate of the proceeds of the sale of the entire impression of 20,000 copies.

"BRITISH PHARMACOPŒIA" STATEMENT.

CHARGE.

To printing, binding, &c., &c., 20,000 copies	£1764	0	0
,, Remuneration to two editors ...	550	0	0
,, Pharmaceutical Investigations ...	100	0	0
,, Travelling expenses to Dr. Apjohn ...	25	4	0
,, Honorarium to Pharmacopœia Committee	500	0	0
,, Advertising, &c., &c. (estimate) ...	86	0	0
	£3025	4	0
,, Amount due to Medical Council on publication of the first edition ...	600	0	0
Balance	374	16	0
	£4000	0	0

DISCHARGE.

By 20,000 copies at 6s. each	£6000	0	0
Deduct—			
Allowance of one-third to booksellers ...	2000	0	0
	£4000	0	0

Moved by Dr. STORRAR; seconded by Dr. RUMSEY; and agreed to:

"That the Report of the Finance Committee be adopted."

This concluded the sittings for this day, and the meeting adjourned.

FRIDAY, JUNE 7TH.

The report of the Committee appointed on May 31st to prepare a scheme for the visitation of examinations for the next year, and especially to consider the best means of supervising the Arts Examination, was brought before the Council by the Chairman, Dr. Alexander Wood. This report having been considered on the whole to be satisfactory, it was adopted with but slight modification. We append the report as amended:—

(REPORT.)

"Your Committee report, that by the Medical Act, two methods of Visitation of Examinations are permitted:

"One by the members of Council;

"The other by persons deputed by the Council;

and they presume that a combination of the two would not be contrary either to the spirit or the letter of the Medical Act.

"A Committee appointed by the Council, on this subject, reported in favour of the second of these methods (*see* Minutes, vol. i., p. 126); but their suggestions were, on the 1st July, 1861, rejected by large majorities in the General Council.

"On the 6th April, 1865, the following motion was agreed to by the Council (Minutes, vol. iii., p. 165):

"'That each of the Branch Councils, or such of their members as may be deputed by such councils, shall from time to time, visit the examinations, preliminary as well as professional, conducted by the Qualifying Bodies in their respective divisions of the United Kingdom, and report the results of their observations to the General Council.'

"Under this resolution the Branch Councils gave in reports in 1866.

"In 1866 the same plan was continued with this addition, that the visitors were required to include in their re-

ports a statement of the facts observed, and of their opinion of the efficacy of the examinations, as also such remarks and suggestions or defects in them as circumstances may indicate—(Minutes, vol. iv., p. 279.)

"Under this resolution reports have been given in, in 1867, which have been repeatedly admitted, by various members of the Council, to be of great interest and value; and they will, in all probability, be rendered more conducive to the improvement of the examinations by the labours of the Committee appointed by the Council this Session, and which is still sitting.

"Your Committee regret to find that while the Examinations of every Licensing Body in England have been visited and reported on, the reports from Scotland and Ireland are defective; that of Scotland not including any report on the University of St. Andrews, the Royal College of Physicians of Edinburgh, and the Royal College of Surgeons of Edinburgh, although the joint examination held by these bodies is reported on; while from Ireland no report has been given on the examinations of the Apothecaries' Company.

"After a very full consideration of the subject, your Committtee have determined to report that it appears to them desirable to continue the present system for one year longer at least.

"They are, however, of opinion, that each Branch Council should consider how far it is necessary to visit annually the Examinations of each Licensing Body, and whether the labour and expense of conducting these visitations might not be abridged by limiting the visitations of each year to the examinations of certain bodies only.

"In regard to the visitation of the Arts Examinations, the Committee have fully considered the propriety of having it conducted by Special Examiners as well as by mixed boards; they are of opinion, however, on the whole, that such a change is not desirable."

"That the Visitors of Examinations shall in future receive payment for their services, at the same rate as for attending a meeting of the Branch Council, in addition to travelling expenses."

"That the expense of visiting the examinations be paid from the funds of the General Council.

"ALEXANDER WOOD, *Chairman.*"

The following report of the Committtee on the subjects of professional education was next brought forward and discussed paragraph by paragraph:—

"The Committee appointed to consider and report 'what are the subjects without a knowledge of which no candidate should be allowed to obtain a qualification entitling him to be registered?' beg to submit the following lists of subjects:—

"1. ANATOMY.
"2. GENERAL ANATOMY.
"3. PHYSIOLOGY.
"4. CHEMISTRY.
"5. MATERIA MEDICA.
"6. PRACTICAL PHARMACY.
"7. MEDICINE.
"8. SURGERY.
"9. MIDWIFERY.
"10. FORENSIC MEDICINE.

"The Committee in enumerating the subjects a knowledge of which should constitute a minimum of the acquirements possessed by every registered Medical Practitioner desire to add the following explanatory remarks:

"CHEMISTRY should include a knowledge of the principles of Chemistry, and of those details of the science which bear on the study of medicine.

"MEDICINE AND SURGERY should include a knowledge of systematic and clinical Medicine and Surgery, and also of Morbid Anatomy.

"FORENSIC MEDICINE should include a knowledge of Toxicology and of the principles of Hygiene.

"The Committee desire further to recommend that the knowledge of these subjects should be not only theoretical, but such as can be tested by practical examination.

"RICHARD QUAIN, *Chairman.*"

Dr. QUAIN, as chairman of the committee, considered that but little need be said by him on the report which he had the honour of submitting for the approval of the Council, he would only allude to it in general terms. It being the duty of the Council to determine what were the subjects necessary to be taught a man, before he was competent to exercise his profession as a physician or surgeon, he deemed that those enumerated in the report would not be considered too stringent, and although he did not lay it down as a rule, that a man whose vocation was a physician should be required to know how to cut off a leg or to tie an artery; yet the knowledge he wished to be imparted to all, should be thoroughly practical, and that though a perfect knowledge of the theory of each individual subject should not be enforced, still something of each should be known, that when the practitioner was called in to see a patient in any emergency, as was so often the case, be he physician, surgeon, or apothecary, he should be able to treat the case promptly and efficiently, and he thought that if the recommendations contained in this report were adopted, a great step towards this end would be attained.

Dr. AQUILLA SMITH agreed with what had fallen from Dr. Quain, and deemed the report to be, in the main, eminently satisfactory. There was, however, one omission to which he must object, namely, the all-important subject of botany.

Dr. STORRAR hoped that no objections would be taken to the ten subjects mentioned in the report being made compulsory. They could not possibly pass a milder measure than that proposed, the only question was whether it could not be extended. He considered a knowledge of them to be quite as necessary for a physician as for a surgeon, and *vice versa*. For the examinations at the College of Surgeons, attendance at the lectures on nine out of these ten subjects was enjoined, so that it was not altogether a new thing the Council were asked to sanction; although, he was sorry to say, students who had attended them were not examined as to what benefits they had received thereby, he was, however, pleased to know that even this would soon be required.

Mr. COOPER would give his entire approval to the measures proposed. He would ask how they could think of sending any man forth as duly qualified to practise his profession either in this country or the colonies if he were deficient in any one of these branches.

Mr. HAWKINS thought there were great difficulties in the way of compelling every man to pass examinations on all the subjects contained in the report. There were exceptions, and he premised that, according to the part each intended to adopt as his future profession, he should be more particularly examined on subjects more especially pertaining to that branch.

Mr. RUMSEY begged to introduce his remarks by expressing his satisfaction that the amendment which he was about to propose had been virtually advocated by his old friend, Mr. Cæsar Hawkins, to whom he owed the direction of his early studies in surgery. He also confessed, with much regret, that he was deprived of the support which, he believed, he should have received from Dr. Stokes, whose absence that day, and the cause of it, all so much deplored. His object was to ask the Council to consider the advisableness of retaining what is here called "Forensic Medicine" in their educational programme. He would in the first place briefly notice an error in terminology. "Forensic Medicine" was only a part—even a small part—of legal or public medicine; and he could not conceive that it was intended to give exclusive prominence to that branch of the subject. He would ask, then, ought legal or state medicines to be included as a *necessary* subject of professional education and examination for all who were to be admitted on the register. Now, if

it were not intended to include the other branches of public medicine, then by far too little was required; but, if preventive or prophylactic medicine, and the elements of psychological medicine were to be included, then the demand was certainly too great. He saw that, by a subsequent explanation of terms in the Report of the Committee, "Forensic Medicine is to include the principles of hygiene." Now, this was a vast subject, for he presumed the knowledge to be required was not merely such as might be obtained by attending one or two of the courses of lectures given in some universities and medical schools on this subject, but a much wider and deeper understanding of these "Principles of Hygiene." He presumed that it would include a knowledge of the physical sciences, such as is demanded by the London University for its science degrees. It would also include a more minute acquaintance with pathology, human and comparative; also, a practical acquaintance with *vital and sanitary statistics*, and of the true method of using *numbers* in matters of public health. Then, it should also include the study of *medical topography and climates*, *i.e.*, of the external circumstances of the population to be advised for. It would, on all these grounds, involve a more extended knowledge of ætiology, or the causation of disease and mortality. The demand, if inclusive enough, was too great, for the following reasons:—1st. Because, within the age of 21 (the age at which we permit youths to enter the profession), and within the four years of study, which we deem a sufficient period of preparation for practice, so comprehensive a group of subjects could not be properly taught or effectively learnt; 2nd. Because those subjects which are of the greatest practical importance to the general medical practitioner ought to occupy the whole of the period allotted to professional education. To introduce State Medicine into this course, it would have necessarily one of two results—*(a.)* If the pupil devotes full attention to the ordinary subjects of professional education (all of which he must know before he is turned loose upon the public) he will have no time left to master the great and growing questions included in the terms preventive and legal medicine, and which are not adequately provided for in the present courses of medical education. *(b.)* If the pupil bestows that careful study to the various branches of public medicine which their importance demand within the period which we have defined for medical education, then he maintained that (unless he be a man of extraordinary power—a sort of Admirable Crichton) he would not have time to prepare, as he ought, for the ordinary work of a curative practitioner. Such, then, were the chief reasons for which he objected to an inclusion, which, if not supplemented by further study and additional examinations, must either end in the grant of a sham qualification, the production of an imperfectly-qualified body of medical jurists and health officers, the frequent performance of medico-legal forces in the courts of justice, and the official supply of fallacious and absurd sanitary advice to local administrative authorities; or it must impair materially the student's chances of attaining a sufficient amount of knowledge in curative medicine and surgery, and in those sciences on which medical practice was necessarily based. He wished not to be misunderstood. By no means did he propose this amendment for the purpose of banishing hygiene and legal medicine from medical education, or of interfering with the laudable efforts which were being made in this direction by many of our universities and great medical schools; but he did it for the purpose of ultimately establishing those studies and qualifications on a more safe and true basis. When the proper time arrives, he was prepared to propose such an extension of our scheme of medical education as would provide for the acquirement of a substantial and trustworthy qualification in hygeiology and legal medicine. He did not assume that they should think of creating a numerous class of such men as Taylor, Christison, and Geoghegan: that would be impossible; but he was ready, if his amendment was carried, to propose that, in order to promote the attainment of a high qualification in preventive, legal; and psychological medicine, a further period of study in those subjects be required, and that the age of 23 be the earliest age at which any candidate having previously obtained a licence to practise from one of the bodies in schedule (A) should be admitted to examination for a certificate in Public or State Medicine. The public necessities demanded the institution of some such mark and test. A class of men distinguished by special qualifications in these subjects, was necessary, both for the credit of the Profession and for the satisfaction and security of society. There was an increasing demand for men so qualified, by public bodies, by coroners, by courts of law; and the unfitness of the existing body of practitioners had been nobly and candidly confessed by our best authorities. He begged leave to quote from two distinguished living authorities.

"It is obvious that the Profession as a body does not possess these qualifications for the peculiar duties of scientific instructors of the State. To credit the average general practitioner, pure surgeon, or pure physician with such qualifications, would be transparent flattery, for neither the special literature which we possess, nor the requirements of our educating and examining bodies, nor the relations in which the majority of practitioners are placed towards society, afford any means for their attainment."—*Dr. Anstie.*

"The evidence is often of a kind that involves minute investigations, and an exact knowledge of subjects that may not be actually required by a medical man more than once or twice in a life-time, however experienced and eminent he may be as a practitioner. He may have got up the subject thoroughly when going through his academic curriculum, and he may be an old man before he has had to draw upon such knowledge for judicial purposes. It may have been as latent, or unemployed, or well-nigh forgotten, as the processes and foramina of the sphenoid bone, or the reflections of the peritoneum, or as the natural history of some plant in some remote corner of the globe, that furnished some dusty old drug once in favour with doctors. Dr. Symonds added, which of us would like to have to tell all the proofs that an infant had never lived an extra-uterine life."—*Dr. Symonds.*

He might also appeal to one of the illustrious dead, the late Professor Graves of Dublin, whose authority on such a point no one could question:—

"But you are told that you may be called upon to decide questions of medical jurisprudence which demand an accurate knowledge of chemistry; that you will be required to test poisons, and detect them when accidentally or purposely mixed with food or drink. What should you do in such cases? Why, do not undertake any investigations of the kind, refuse to make them, refer them to those who are competent to the task. Where will you find a man engaged in the practice of physic, fully capable of deciding such questions? What practising physician or surgeon is competent to enter at once upon an investigation of this nature? I have lectured some three or four years on medical jurisprudence, and have bestowed a good deal of attention on the subject, and yet if called upon to decide a case of poisoning, I would refuse, and say I was incompetent to the task. What, then, is to be done under such circumstances? This is a matter of deep importance to society. It is of the utmost consequence that the wretch who poisons should not escape, and that the innocent should not suffer. It, therefore, behoves the Government to employ and pay persons capable of deciding such questions. [Here the President —*pro tem.*, Dr. Christison—interrupted Mr. Rumsey by saying that he should be obliged if he would be as brief as he possibly could, as he had already occupied much of the Council's time. Mr. Rumsey said he had but two lines to read when Dr. Christison interrupted, and as he did not often occupy the attention of the Council, and had then spoken but ten minutes, he claimed it as a right to be heard by the Council, and proceeded]—Then, and not till then, will the task be duly performed, and the de-

cisions be such as the public can look up to with respect and confidence."—*Dr. Graves.*

He implored the Counci not to stultify their proceedings by requiring impossibilities, and by sanctioning a system of professional employment in public inquiries, which had hitherto inflicted much obloquy on medicine, and caused extreme dissatisfaction and distrust in the public mind.

Dr. EMBLETON quite concurred with the remarks that had fallen from Mr. Hawkins. He wished to take the broad yet simple view of the question. If a student intended to pursue the vocation of a physician, he should be more particularly examined on those branches which pertained to the clinical practice of medicine; if that of surgery, the various subjects connected with surgery should be more particularly dwelt upon in his examinations. Certainly a knowledge of all these subjects would be essential in either case, and no man should be allowed to go forth as duly qualified unless he possessed this knowledge.

Dr. APJOHN would like to see the subject of botany introduced, as he deemed it of greater importance than even forensic medicine.

Dr. ANDREW WOOD thought that at first sight the subject did not partake of the importance it deserved. But in effect it challenged the Council whether or not it was necessary for a man to have a knowledge of every one of these branches of education, before he became a qualified practitioner. He held that a man, to be a good physician, must know something of surgery; and a surgeon must also be acquainted with the theory and practice of physics. He knew many had been put on the register merely through the possession of a licence in midwifery, when he had never been tested as to his knowledge of surgery, and the same thing happened every day with licentiates of the Apothecaries' Hall. He contended they were not in a position to admit pure physicians or pure surgeons—they were in the hands of the public, and the public weal must be consulted.

Dr. FLEMING said, as he understood the subjects enumerated in the report were to be adopted as the minimum standard, he would support it. But on the subject of forensic medicine he must be permitted to say with Mr. Rumsey that it had such a broad scope, that the time allotted to pupils was quite insufficient. It was a study of a life-long character, and he hoped that particular branch of education would not be pressed.

Sir DOMINIC CORRIGAN considered the omission of botany a very serious matter. When a man was called in to give evidence upon a case of poisoning, how could he do so unless he understood the poisons of various plants, and the effects exercised by each upon the system.

Mr. HARGRAVE hoped that if botany was now on the list of optional subjects, it would be at once transferred to the compulsory list.

Dr. ALEX. WOOD said if this list of subjects was to be adopted as the minimum standard, where would the maximum test lead them to? Did the Council mean to infer that because a man was not *au fait* on every one of these subjects he was not fitted to practise? He maintained that the requirements were too stringent, and that if they persisted in drawing the strings too tight, they would assuredly snap asunder. Dr. Wood suggested that as there was no immediate necessity for legislation on the point of medical education, but in preliminary study, they should pass the matter to a more convenient time.

Dr. PARKES admitted that hygiene was not necessary, but stripped of that the list did not appear to him a very terrible one, and he hoped the Council would adopt it.

Dr. CHRISTISON knew that botany was a difficult subject to handle. In the Edinburgh University they required it, absolutely, and he had noticed that it was a subject of all others most liked by students; if it were possible, he would like to see it embraced in the list of compulsory subjects for all bodies. He instanced the fact, that there was a species of belladonna, in appearance much like the common blackberry. Now in this case it was important that if a child were brought before a medical man he should be able to determine whether the symptoms were those from an overgorging of blackberries or from eating only a few berries of the belladonna plant.

Dr. QUAIN then proposed that the report as amended be adopted, which, with the exception of the two last paragraphs, was carried *nem. con.*

The following letter, relating to the case of Mr. Forman, was handed to our reporter for publication :—

"Dr. Alexander Wood presents his compliments to the President of the General Council of Medical Education and Registration, and begs to hand to him the accompanying letter, which he received this morning from the Secretary of the College of Physicians of Edinburgh—

"Physicians' Hall, Edinburgh, 6th June, 1867.

"MY DEAR WOOD,—I write a line to say that Forman has returned his diploma, so that now the College is free from him.—Yours very truly,

"D. R. HALDANE.

"Dr. A. Wood."

SATURDAY, JUNE 8.

The Council resumed its sitting at one o'clock, and proceeded to a consideration of the following report :—

"REPORT OF THE COMMITTEE ON RETURNS FROM THE LICENSING BODIES OF PROFESSIONAL EXAMINATIONS, AND THEIR RESULTS, AND ON THE REGISTRATION OF STUDENTS FOR THE YEAR 1866.

"The Committee beg leave to lay before the Council, a table, compiled from the returns, according to recommendation 6, sect. v. of the recommendations of the General Medical Council of 1866, viz. :—"That returns from the licensing bodies in schedule (A) be made annually, on the 1st of January, to the General Medical Council, stating the number and names of the candidates who have passed their first, as well as their second examinations, and the number of those who have been rejected at the first and second examination respectively."

TABLE.

Licensing Bodies.	Passed.		Rejected.	
	1st Examination Number.	2nd Examination Number.	1st Examination Number.	2nd Examination Number.
R. Coll. Phys. London	69	60	22	6
R. Coll. Surg. England	373	344	136	76
Soc. Apothecaries, London	202	233	33	10
University of Oxford	2	2	2	...
,, Cambridge	11	5	2	...
,, Durham	2	2	...	...
,, London	*22	25	15	1
R. Coll. Phys. Edinburgh	90	220	35	51
R. Coll. Surg. Edinburgh	†75	†119	31	39
Fac. Phys. Surg. Glasgow	31	52	10	22
University of Aberdeen	(1st) 48 (2nd) 30	(3rd) 33	(1st) 1 (2nd) 12	(3rd) 6
,, Edinburgh	(1st) 58 (2nd) 92	(3rd) 62	(1st) 18 (2nd) 28	(3rd) 18
,, Glasgow	49	48	(1st & 2nd) 6	(3rd) 1
,, St. Andrew's	...	‡10	...	...
K. & Q. Col. Phys. Ireland	1 ...	78 54	... in Midwife.	4 4
R. Coll. Surg. Ireland	113 in Surg. 8 in Midwife.	98 ...	19 ...	8 ...
Apothecaries' Hall, Ireland	23	34	3	4
University of Dublin	12	32	10	3
Queen's University, Ireland	...	No Returns.	.	.
	1311	1511	383	253

* By the Regulation, University Candidates are allowed, under certain conditions, to postpone their examination in Physiology until the first M.B. Examination of a subsequent year.

† In this return, those gentlemen having the letter D prefixed to their names in both columns, were Candidates for the Double Qualification in Medicine and Surgery of the Royal College of Physicians and Surgeons of Edinburgh.

‡ Final Examination for M.D. under old regulation.

"It will be observed that returns have been sent in by all the licensing bodies with the exception of the Queen's University in Ireland, from which no return has been received since 1864; and the Committee would therefore suggest that the Registrar of the Council be directed to address a letter to the authorities of the Queen's University in Ireland, requesting them to furnish a return of professional examinations and their results, in accordance with the recommendation of the General Medical Council.

"2. The Committee find that of students registered for the year 1866, there were:—

In England	477
„ Scotland	302
„ Ireland	157
Total	936

"The Committee are aware that, owing to imperfections in the registration of 1865, a number of students who commenced professional study in that year were only registered in 1866; but the Committee have not sufficiently accurate information to enable them to state the exact number of such students.

"Of the whole number of students registered in 1866, it appears that 580 passed the preliminary examination in that year. Of the remainder, 208 passed the preliminary examination in 1865, and 146 in previous years.

"The Committee would suggest that a tabular statement of the number of students registered in the three divisions of the kingdom be appended to the list of medical students registered during the year.

"D. Embleton, *Chairman.*"

It was moved by Dr. Storrar, seconded by Dr. Sharpey, and agreed to, that the report be adopted.

The report of the Committee of Examinations was next brought forward and discussed; but as, in the present stage of the Council, it could not possibly be thoroughly and practically gone into, it was referred to their next meeting. This report is a very voluminous, at the same time a very valuable one, and we hope our space will not preclude its publication in our next, as is the case in the present issue.

Dr. Andrew Wood moved, seconded by Dr. Parkes, and agreed to:—

"That the report of the visitation of examinations be received and entered on the minutes, and that the consideration of it be postponed till next session. That, in the meantime, the report be sent to the various licensing bodies, with a statement that it has been drawn up by a committee, but has not yet been considered by the Council, who are desirous, before discussing the suggestions contained in it, to ascertain the opinions of the licensing bodies regarding them."

Mr. Cæsar Hawkins moved, seconded by Dr. Smith, and agreed to:—

"That the Executive Committee be authorized to apply to the licensing bodies for such information as may be necessary for the due execution by the committee of such business as may be delegated to them."

Dr. Apjohn having expressed his desire to retire from the post of member for Dublin on the Pharmacopœia Committee, Dr. Aquilla Smith was appointed in his stead.

The following motions, by Dr. A. Smith, were then moved and adopted:—

"That a fifth volume of the Minutes of the General Medical Council, the Executive Committee, and the Branch Councils, with a complete Index, up to the end of the year 1867, be published without any unnecessary delay."

"That the thanks of the Council are due, and are hereby tendered to the Treasurers, Dr. Sharpey and Dr. Quain, for their important services."

"That the thanks of this Council are eminently due, and are hereby offered, to the Royal College of Physicians, London, for their obliging and courteous accommodation during the present session of the Medical Council."

The Registrar was requested to convey this resolution of the Council to the Royal College of Physicians in write, and Dr. Risdon Bennett, as the representative of this College, was asked to bring the same personally before the College at their next sitting.

"That a gratuity of twenty guineas be given to the resident officials of the College of Physicians, for services rendered to the Council."

Dr. Sharpey in proposing "that gratuities be given, of thirty guineas to Mr. Bell, and twenty-five guineas to Mr. Roope, the Clerks, in consideration of the satisfactory manner in which they have performed their duties, and for their extra trouble in conducting the sale of the new edition of the British Pharmacopœia, bore testimony to the intelligence and zeal that had on all occasions been displayed by those for whom he proposed this gratuity, especially in the sale of the new Pharmacopœia. He had noticed with pleasure the assiduity and care that had been shown by them; and he was convinced, that for the extra trouble, which had devolved upon them on this and other occasions, there would not be a dissentient voice in the Council to vote for them the sum he asked. This having been carried,

Dr. Andrew Wood in proposing the last motion, which we need scarcely add was carried with acclamation and genuine enthusiasm, bestowed a very high eulogium on the character of the President, of his talents in Committee of the valuable advice he was wont to give the Council, and last, though not least, of his great courtesy, and efficiency in discharging the onerous duties of that chair:—

"That the thanks of the Council are hereby cordially tendered to the President for his kind, courteous, and efficient services during the present session of the General Medical Council."

The President in reply, begged to thank the Council most sincerely for their kindness in according to him such a vote. He esteemed his position at that Board very highly, and still more that it met with their approbation. If at any time he appeared to them a little severe in his decisions, they must remember that he was always actuated with a desire to facilitate the business of the Council in the various measures brought before them. He begged to make one other observation before they parted. It was his desire that a copy of the new Pharmacopœia should be sent to all the foreign, colonial, and American bodies, that they might see what England was doing in that direction; and, he would further suggest, that each copy be despatched with the edges cut and gilded. This suggestion having been agreed to, the session of the General Medical Council of 1867 closed.

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conduct of the Government, and the Council is to be congratulated on the manner in which it repudiated the proposal that it should abdicate its functions by suffering a Secretary of State to decide on the admission or exclusion of certain persons on the Register; it is its first duty, both to the public and profession, jealously to guard. Never was a more unjustifiable slight offered to such a body, than this cool suggestion of granting the Government authority to review the decisions of the Council. Surely we might as well place ourselves under a paternal despotism at once, as allow a Secretary of State to issue his fiat, giving permission to practice.

If public opinion had not already unmistakeably declared that Mr. Ex-Secretary WALPOLE was unfit to fill any official position, the manner in which he attempted to deal with an important department of the public service, and a numerous and learned profession, would have called for our animadversion. It seems to us, however, that the Medical Council have been only unfortunate in the delay which Mr. WALPOLE'S obstructiveness has imposed upon them, and that they may proceed to the discharge of one of their most important functions in pushing forward the Medical Amendments Bill, without the least regard to the latest of the diplomatic stupidities which have rendered Mr. WALPOLE'S official reign a fit epoch for record in the Almanacks.

Having referred Mr. WALPOLE'S letter to a Committee to prepare a reply, the Council occupied itself with a discussion on the revision of standing orders, which, as it possessed no general interest, we took the liberty of curtailing.

Nevertheless, the character of the discussion affords us a text. In every assembly, as a rule, there is a greater or less number of persons, who in the desire to distinguish themselves, and in that poverty of discrimination which does not enable them to find a cue in the legitimate debate, are doubly acute on points of order. They obstruct business at every turn by rising "to order," and render it impossible to discharge business by their efforts to promote regularity. Experience of such interference often prompts the suggestion that in the foundation of societies there should be neither bye-law nor standing order, which, for one occasion that they are useful, are in twenty instances simple impediments.

By a redundancy of such members, the transactions of the Medical Council are like a street block, frequently brought almost to a stand-still, and while the headmost van-driver is fending with the policeman, the long cue of attendant conveyances wait for progress. One is led to wish that we had less zeal for system and regularity, at the risk of occasional blunders and less polished phraseology, with the advantage of more rapid progress of business.

We propose to return to our review of the Council's proceedings next week.

REPRESENTATIVES OF THE SCOTCH UNIVERSITIES.

SHOULD the present Scotch Reform Bill become law, we sincerely hope that the Profession will make an effort to secure both the University seats. We have already discussed the case of the united Universities of Edinburgh and St. Andrews, and we may add, that during the week several new names have been mentioned as likely candidates. We are also in possession of the names of several Medical Graduates who are prepared to put to the test the power of the Profession to return the member. Some of these, however, think it better to take no step until the bill shall have become law.

Respecting the united Universities of Aberdeen and Glasgow, many rumours are afloat. We believe the lawyers are prepared to contest the seat, besides which the names of merely political personages have been freely mentioned.

We hope that neither will be able to snatch the seat from science, and particularly from medicine. There are many good men and true who would accept the honour among the Medical Graduates of Glasgow and of Aberdeen. Amongst these, we beg to point out one whose claims are considerable, and who would unite local interest to that of the Profession. We allude to Dr. ANDREW CLARK, whose lectures before the London College of Physicians we recently reported. Dr. CLARK is well-known in political as well as professional circles, and has always taken an interest in those questions which the Profession desires to bring before Parliament. He is himself a Graduate of Aberdeen, and his present position in London is such that he has a right to look for such recognition. His name is familiar to the public in connection with the Mansion-house Cholera Committee of last year, as Physician to the London Hospital, and as a warm supporter of Mrs. GLADSTONE'S proposed Convalescent Hospital, which has already received our cordial approbation. The advantages which an influential member resident in London throughout the year might confer on such a constituency need not be pointed out. The Medical Graduates would do well to take steps to secure such a representative as Dr. ANDREW CLARK.

THE RECENT EPIDEMIC IN DUBLIN.

IN our present number we give a considerable portion of the debate at the College of Physicians in Dublin, and next week we hope to conclude this report, and, at the same time, to make some remarks on the subject in our leading columns.

We should have had much pleasure in concluding the report this week, but the necessary publication of the proceedings of the Medical Council, and other matters of passing interest, render this impossible. Meanwhile, we may say that the epidemic in ques-

tion has become a subject of national importance, as only a few days ago, Lord Naas, in his place in the House of Commons, was asked, and had to reply to a pointed question regarding it.

METROPOLITAN POOR-LAW MEDICAL OFFICERS' ASSOCIATION.

This Association, which was called into existence last year, has just issued its Quarterly Report, and this fact affords us the opportunity of drawing attention to the proceedings of a society, which has not only been well supported by the Poor-law Medical Officers, but by a large number of hospital physicians and surgeons, who have allowed their names to be placed in the list of honorary members.

The objects of the Association, as set forth in the rules adopted at the first general meeting, in July, 1866, are as follows:—

1. To obtain for the sick poor chargeable to the State, the advantages, in respect of nursing, dietaries, supply of medicines, medical and surgical appliances, cubic and floor space, ventilation, light and general treatment, enjoyed by the sick poor in hospitals and kindred institutions, supported by voluntary contributions."

2. To obtain life appointments for all Poor-law Medical Officers, and entire, instead of partial, payment of salaries from the Consolidated Fund; and thus to secure, at once, due recognition of their position as State servants and greater freedom and independence of action.

3. To provide a basis for consultation and united action, in all cases of difficulty arising out of the nature, and in the discharge of their duties.

4. To obtain an authoritative decision upon all disputed questions relating to duties and extra medical fees.

5. To obtain from the local authorities the provision of all medicines and appliances prescribed for the sick poor, and the employment and payment by the same, of qualified dispensers.

6. To address representations to the Poor-law Board by memorial and deputation, and, if need be, to petition the Legislature in such cases and circumstances as may appear to render such action necessary: and, generally, to provide a channel through which all defects in the Poor-law medical service may be brought to light and discussed with a view to their removal or amelioration.

It may readily be imagined how much of that sort of exertion, described in the 6th clause, has been called for during the last few months. The passage of Mr. Hardy's bill through the House required the constant vigilance of the leaders of the Association; and, though their efforts were not in every instance successful, still, we think, on the whole, they have good reason to be satisfied with their achievements, since they can show a useful result to their labours, and their organisation is eminently calculated to secure to the Poor-law Medical Officers the consideration to which they are entitled. Then again, the Association is not without work in reference to the Vaccination Bill now before Parliament, nor can we conceive anything more desirable than that such a body should take steps to inform the Legislature of their opinions in reference to so difficult a question. The cumbrous machinery of the proposed bill, the inadequate remuneration, the multiplicity of certificates, and so on, are points on which the Council are prepared to act. An opinion is expressed in the quarterly report, that no legislation will be effective that does not provide adequate payment to the vaccinator, efficient inspection, and compulsory prosecution by the inspectors. The amount named as a minimum is 2s. 6d. per case, *at the station*, and surely no one can pretend that this is too much for the work.

Another question of great importance, and to which we shall again more particularly allude, is the desirability of having uniform dietaries for the several classes in the workhouses.

To this subject the Association has lately devoted a large share of attention. Dietary tables have in fact been circulated freely for suggestions, and a large number of replies having been received, a scheme has been finally settled, and is now being urged on the Poor-law Board.

To the following resolutions which were submitted to Mr. Hardy while president of the board, no reply has at present been received, but they are no doubt engaging the attention of his successor:—

1. That the power of the Medical Officer to order "extras" and comforts for the sick poor should be defined so as to preclude the possibility of future collisions with the Guardians, Managers, &c.

2. That in the interest of the ratepayers and of the Medical Officers provision should be made for a more rigid examination of applicants for sick relief; and, if possible, a definition of those entitled to such relief should be laid down by the Central Board.

3. That an authoritative Pharmacopœia for the metropolis should be issued by the Poor-law Board, in accordance with the practice in voluntary hospitals, so as to facilitate prescribing and inspection.

4. That there should be uniform dietaries for all classes of the poor in the Metropolitan workhouses, hospitals, asylums, and district schools, to be directed by the Poor-law Board.

5. That provision should be made for the establishment, as far as practicable, of an uniform system of management in the dispensaries, the workhouse-hospitals, and the asylums.

To this we may add quotation, showing clearly the work that has been done in the last quarter:—

"Your Council feel that the Association may be fairly congratulated upon the success of Mr. Hardy's Bill. They cannot, however, but regret that the right hon. gentleman, by his removal to another department of the Government, will be unable to carry into effect his own measure—a measure with which his fame as a statesman must be enduringly associated. That the Act will confer many and great advantages upon the sick poor, and will tend to improve the position of the medical officers there can be no doubt: but time and experience alone can tell to what extent. The only indications your Council possess, at present, of the probable working of the Act, are to be found in an important joint-report by the metropolitan inspectors, published not long since. This report also reveals the interesting fact that the views of this Association are, in the main, very much in accord with those of the inspectors, who, among other things, advocate uniformity in management of the workhouses and uniformity of dietaries. This latter question is one which has long engaged the attention of your Council, and so far back as September, 1866, they tendered the services of the Association to the Poor-law Board with the view to the formation of a suitable dietary-table for general use in the metropolis. They have deemed the present time opportune for bringing the subject prominently before the Association, in the hope of striking out a scheme which may eventually put an end to the anomaly of the same classes of the poor in the forty workhouses being dieted in as many different ways. This they think may be effected without introducing any extreme changes in the mode in which the inmates have been hitherto dieted."

Now, the propriety of urging the general adoption of a fixed dietary must, to a certain extent, depend on the scale adopted, and this can scarcely fail to give rise to considerable differences of opinion. Yet we may very properly observe that a scheme which has been framed in such a manner as this, and upon which so large a body of professional men has definitively pronounced a favourable opinion, deserves the most careful consideration of all interested in the matter. We therefore add the several dietaries as they have been finally adopted by the Association:—

Nos. 1 to 5—House Diets.

No. 1.—Children from 2 to 5 years of age.

Breakfast and Supper—4 oz. of bread, ½ pint of milk, and ¼ oz. of butter.

Dinner
- Sunday, Tuesday, and Thursday—3 oz. of mutton, and 6 oz. of Potatoes.
- Monday and Friday—½ pint of scouse or Irish stew, and 2 oz. of bread.
- Wednesday—6 oz. of suet pudding, and ½ oz. of sugar or treacle,
- Saturday—8 oz. of sweetened baked bread pudding.

No. 2—Children from 5 to 9 years of age.

Breakfast—5 oz. of bread, ½ pint of milk porridge.

Dinner
- Sunday, Tuesday, and Thursday—4 oz. of mutton and 8 oz. of potatoes.
- Monday and Friday—¾ pint of scouse or Irish stew, and 3 oz. of bread.
- Wednesday—8 oz. of suet pudding, and ½ oz. of sugar or treacle.
- Saturday—10 oz. of sweetened baked bread pudding.

Supper—5 oz. of bread, ½ pint of milk, and ¼ oz. of butter.

No. 3—Children from 9 to 16 years of age.

Breakfast—6 oz. of bread, and 1 pint of milk porridge.

Dinner
- Sunday, Tuesday, and Thursday—5 oz. of meat and 8 oz. of potatoes.
- Monday and Friday—1 pint of scouse or Irish stew, and 4 oz. of bread.
- Wednesday—12 oz. of suet pudding.
- Saturday—14 oz. of sweetened baked bread pudding.

Supper—5 oz. of bread, and ½ pint of milk, and ¼ oz. of butter.

No. 4—Able-bodied Inmates from 16 to 60 years of age.

Breakfast
- Men: 6 oz. of bread, and 1½ pints of oatmeal porridge.
- Women: 6 oz. of bread, and 1 pint of porridge or sweetened tea.

Dinner
- Sunday, Tuesday, and Thursday—5 oz. of meat, and 12 oz. of potatoes.
- Monday and Friday—1½ pints of pea or barley soup, and 4 oz. of bread.
- Wednesday and Saturday—12 oz. of suet pudding.

Supper

Men and Women
- Sunday, Tuesday, and Thursday—6 oz. of bread, and 1½ pints of broth.
- Monday, Wednesday, Friday, and Saturday—6 oz. of bread, and 1½ oz. of cheese, or ½ oz. of butter, and ½ pint of broth.

No 5—Infirm Inmates, Inmates of Infirm Wards, and all Inmates 60 years of age and upwards.

Breakfast and Supper—5 oz. of bread, 1 pint of sweetened tea (with or without milk as preferred), and ½ oz. of butter.

Dinner
- Sunday, Tuesday, Wednesday, Thursday, and Saturday—4 oz. of mutton, and 8 oz. of potatoes.
- Monday and Friday—1 pint of scouse or Irish stew, and 4 oz of bread, ½ pint of porter (or ale) daily.

Nos. 6 to 10—Sick Diets.

Nos. 6 to 9.

Breakfast and Supper—5 oz. of bread, 1 pint of sweetened tea (with or without milk) and ½ oz. of butter.

Dinner, No. 6—4 oz. of mutton, 8 oz. of potatoes, and ½ pint of porter.

„ No. 7—6 oz. of mutton, 12 oz. of potatoes, and 1 pint of porter.

„ No. 8—8 oz. of cooked fish, and 8 oz. of potatoes.

„ No. 9—1 pint of beef-tea, and 4 oz. of bread (and 1 pint of arrowroot, at night.)

No. 10—Milk Diet.

Breakfast—3 oz. of bread, and ¾ pint of milk.
Dinner—3 oz. of bread, and 1 pint of milk.
Supper—2 oz. of rice, and ¾ pint of milk.

The sick diets Nos. 6 to 10, together with mutton chops, eggs, light pudding (custard and rice) to be included in an *ad libitum* diet for special cases, as directed by the Medical Officer.

Casuals and refractories to have the uniform diet prescribed by the Poor-law Board.

Lunatics to have, according to circumstances, No. 5 or No. 7 diet, or, generally, any of the diets (Nos. 4 to 10), at the discretion of the Medical Officer.

Children under 2 years of age to be dieted at the discretion of the Medical Officer.

Suckling women to have No. 5 diet. (Beef or mutton on meat days).

It would be found economical to use only legs and shoulders of mutton for the sick, aged, infirm, and young children. The children should have roast meat at least once in each week, and the sick and infirm twice or thrice.

The allowance of meat to be reckoned free from bone and after cooking.

The broth should be thickened with rice or pearl barley, and properly flavoured with herbs, vegetables, &c.

The beef-tea should be made exclusively from lean beef, and all fat should be carefully skimmed off before serving. Each inmate should be allowed to add condiments to taste.

The arrowroot should be made with milk (1 pint to the ½ oz. and 1 oz. of sugar). This food might, as a rule, be served by the night nurses.

The tea should be served, to each ward, in a tin vessel of adequate capacity, provided with lid and tap. The milk should not be added before serving. The tea must not be boiled. There would be no objection to each inmate of the sick and infirm wards having a weekly allowance of dry tea and sugar, and it would be much preferred by them.

The bread for the sick and infirm should be served to the nurses of each ward in loaves, and not in allowances, for each inmate separately. Thereby great waste of bread would be avoided.

Arrangements should be made for serving the food in a hot state. There should be a separate kitchen for cooking the sick diets.

The porter should be of the best quality.

An occasional dinner of bacon: and the occasional substitution of cabbage and other vegetables, for potatoes, would be an agreeable and beneficial change, and is strongly recommended.

All measures to be of the Imperial standard.

"Extras," wines, spirits, &c., for the sick, to be specially ordered by the Medical Officer.

Details of quantities and ingredients for making the scouse, &c., have been intentionally omitted. The principle of uniformity once accepted, these can be readily supplied.

Notes on Current Topics.

British Pharmacopœia.—We understand that up to the close of last week the sale of this book had reached 9000 copies. This, coming so soon after the failure to force the circulation of the former edition, looks well for the prospect of the new one being generally adopted. Our readers will, no doubt, in future prescribe according to the new national work.

The Convalescent Hospital.—As intimated in our last number, a report was current that Her Majesty had been pleased to apply half a million sterling, part of the accumulation in the privy purse during her retirement from public life, to the building and endowment of a Convalescent Asylum. Having doubts as to its accuracy, we simply gave the report and the paragraph from the *Standard* confirming it. We were not surprised to see in the *Times* and other papers a distinct contradiction; no one duly considering the position of the younger members of the Royal family, their connections by marriage, &c., &c., could expect so large a sum to be taken from the privy purse, notwithstanding Her Majesty's well-known desire to promote the happiness of her poorer subjects.

Cholera.—We regret to say that last week a decided case of cholera was admitted to the London Hospital under the care of Dr. Ramskill. We have also heard that more cases have been received into the Paris Hospitals. Is it not time to be at work?

A Doctor Threatening to Shoot a Lawyer.—A warrant was issued for the apprehension of Mr. J. Stringfield, Surgeon at Weston-supermare, who was brought before Mr. Knox at Marlborough-street, charged with feloniously and maliciously sending a letter threatening to kill Mr. W. Watkins, the chief partner in the firm of Watkins, Baker, and Bayliss, solicitors, No. 11, Sackville-street. The letter, which was read at the request of the prisoner, is a singular one. It seems that an unfortunate disagreement arose between him and his wife soon

after their marriage, and that at length proceedings were commenced in the Divorce Court at the instance of the wife. Mr. Watkins is her legal adviser, and the letter charges him with having taken advantage of a woman not of strong character, with having unduly influenced, and indirectly coerced her to conceal herself, and with having employed the writer's own servants and others to steal his three children, and gives him notice that if he (the writer) cannot have access to his children within a reasonable time he will shoot him. Mr. Knox said the peculiar character of the letter rendered it a proper matter of inquiry whether the writer was in his right mind or not, and though he expressed his sorrow for having written it, he was remanded by order of the Magistrate, that his state of mind might be inquired into.

A Good Example.—Mr. Rumsey, whose name was familiar as an authority upon state medicine before he was appointed by the Crown to a seat on the Medical Council, has just set an excellent example by presenting some valuable relics to corporations likely to preserve them. He has given to the Royal College of Physicians of London a copy of Dr. Fordyce's manuscript lectures ; and to the Royal College of Surgeons of England a set of MSS. volumes, containing the lectures of Hunter, Baillie, and Cruikshank. These lectures were taken in shorthand, and then written out by the father of Mr. Rumsey. The two Royal Colleges in London thus acquire for their libraries mementoes which cannot fail to be highly prized.

The Council at Apothecaries' Hall.—Among the great functions of the General Medical Council, which has just concluded its labours, it was but right that it should fulfil the noble one of dining. Not less appropriate was it for the corporation, which is the city guild of the medical bodies, should exercise the hospitality on the occasion. The worshipful company of apothecaries of London provided a very excellent dinner in their Hall, over which, we are happy to say that a unanimity prevailed which has never been equalled in the sittings in Pall Mall.

Masks and Faces.—Under this title Mr. Ernst Shulz is now giving in London an entertainment to which our attention has been directed by a learned *confrere*, as interesting in a Physiognomical point of view. Mr. Shulz amuses his auditors by rapidly exchanging the expression of his countenance so as to personate all varieties of character in turn. The command he has attained over the muscles concerned in facial expression is certainly astonishing, and as the newspapers generally have accepted the entertainment as something decidedly novel, and all London Society has been to see it, we can scarcely do otherwise than mention this feature of the performance. It illustrates, in a very remarkable manner, to how large an extent the expression of the human face depends upon muscular action and may be brought into complete subjection to the will. What can the physiognomists say to this?

The Empress Charlotte.—It is stated in the *Gazette de France* that the Medical attendants of the Empress Charlotte have declared, as the result of their consultation, that their unhappy patient will never recover her reason, and thar her life will be one of very short duration.

The Princess of Wales is going on favourably ; her general health is good, and the knee slowly improving.

ROYAL MEDICAL BENEVOLENT FUND SOCIETY OF IRELAND.

The twenty-fifth annual meeting of this Society was held at four o'clock on Monday week in the Albert Hall of the Royal College of Surgeons,

Dr. Butcher in the Chair.

Amongst those present were—Drs. Churchill, M'Clintock, Guinness, Sharkey, Evory Kennedy, J. Harvey, Daly, Darley, R. P. Walshe, Brady, Stewart, Sipthorpe, Macnamara, M'Donnell, Moore, Vice-President of the College of Physicians ; Bredon, Athill, Quinan, Mackesy, Benson, Duke, J. R. Kirkpatrick, Hamerton, J. F. Duncan, J. H. Benson, Beatty, Baxter, Minchin, Wharton, Osprey, Halahan, Hanrahan, M'Dowell, Bennett, Mollan, H. G. Croly, Johnston, H. Kennedy, Tufnell, Flanery, Greene, Fitzpatrick, Cronyn, Thorpe, Gustace, Maguire, Robert Tate, Chaplin, Thomas Davis, Manorhamilton ; Nugent, Duncan, Grimshaw, Armstrong, Bradshaw, Croker, Denham, Coulton, White, Hagan, Kidd, A. Walshe, and Stoker.

The Chairman said—Gentlemen, it gives me very sincere pleasure that one of my last official duties as President of the Royal College of Surgeons is to preside on this occasion of the annual meeting of the Royal Medical Benevolent Fund Society of Ireland. I say duties, because I am satisfied that no member of our profession, who fairly examines the claims of this valuable Society, but will feel it a duty no less than a privilege to do what he can to promote its interests. Whether we consider the objects which it proposes to itself, the amount of good which it has already effected, or the future benefits which it is caculated to confer under each and all of these aspects, this Society commends itself to our sober judgment, our heart's sympathy, and our cordial support. It was established for a twofold purpose ; first, to "assist our professional brethren when struggling under the pressure of disease or other calamities ;" and secondly, to "administer relief, under circumstances of peculiar urgency and distress, to the widow or family of a professional man whom death had removed." The members of our profession are, like those in every other walk of life, liable to calamities and reverses which no prudence can guard against, no foresight can avert. They are, moreover, from the very nature of their avocations, exposed in a peculiar degree to disease in all its varied forms. The records of our profession—the very list of applications for relief from the widows and orphans of deceased medical men contained in the last year's report of this Society, as well as in that of the present—show how frequently those whose office it is to minister to the bodily sufferings of others are themselves struck down, and become the victims of the diseases with which they are brought into contact. The need, therefore, of such a society as this is so obvious and so urgent that it is only wonderful some effort to establish it was not made long ago. The progress which the Society has made during the twenty-five years of its existence is at once a proof that it supplies a great and acknowledged want, and an omen, I trust, of growing prosperity and increased usefulness for the future. The report, which will be presently submitted to you, will exhibit the exact condition of the Society's finances at the present moment. The Society, as most of you are aware—constituted in May, 1842—began to distribute grants, in money, in the year 1848 ; so that this will be the twentieth year of distribution of grants. Over nine thousand pounds, including the present distributions, have been given in grants since 1848. In the present year there is the largest number of applicants, even so great as eighty-five ; but I am happy to say there is the largest amount available, and to be distributed—about eight hundred and fifty pounds. And now let me speak home to each of your hearts. Among the claimants this year are ten medical men in dire destitution, through age or disease, who are to receive sums varying from six to thirty pounds each ; and on the list for the present year are sixty-two widows, having in all one hundred and eighty-four children. On over-

looking very carefully the report, I find that the management and working of the Society has been conducted in the most economical manner, almost the only expenses being for printing, postage, and collecting. The funded money of the Society, I am happy to tell you, amounts to the sum of £12,000. The objects of this Society being then so excellent in themselves, its achieved results so beneficial, its prospects so hopeful, it needs no argument to prove that it deserves and demands the support of every member of our profession. In the list of its supporters are found the names of many generous donors who do not belong to our profession, but who yet feel that the public at large ought to share in alleviating the distresses of those to whom in the hour of sickness and pain all turn for relief. At the head of that list stands the name of our august patroness, our beloved Queen, and that of the lamented Prince Consort. To particularise other names would be invidious. I shall only add that I am sure the contributions from the general public would be much increased if the members of our own profession as a body evinced more interest in the welfare of this Society than, it must be confessed, they at present do. It is hard to expect that others will feel for us that sympathy which we ourselves do not exhibit, or that they will be zealous on our behalf if we are cold and indifferent ourselves. No maxim is truer than this—"Help yourselves and others will help you too." I will now, Mr. Treasurer, present to you my donation of one hundred pounds for this most valuable Society. (Loud applause.) I will not detain you any longer, gentlemen, but will call on the Secretary to read the report.

The Chairman then, amid applause, handed the Secretary his donation of £100.

Dr. M'Clintock read the report, which appeared in our last issue.

Dr. Beatty moved the adoption of the report and statement of accounts. He said the report was commendable, as it was the first time the Council were able to make a laudatory statement regarding the funds of the Society. This gratifying fact arose out of the gift of their ever-to-be-revered and beloved *confrere*, Dr. Carmichael, who also never lost sight, while alive, of the interests of the institution. The report stated that the amount to be distributed amongst the recipients was considerably more than in former years. He liked the word "considerably," because it showed they were enabled to act more liberally. The sum given to the recipients would be increased, which was a matter of congratulation to them all. The accounts received from the branches were likewise most gratifying. He (Dr. Beatty) regretted that the Committee were not aware that the President intended to have given the munificient subscription which he had announced that day, for they would have taken notice of it in their report. It was a subscription which entitled him to their gratitude, and he trusted that the special thanks of that meeting would be awarded to him.

Dr. Mackesy, in seconding the resolution, observed that he could add but little to what had been said by Dr. Beatty, who had displayed on that occasion the philanthropy, good feeling, and warmth, which always marked his character. It was to be regretted that there should be any apathy amongst their professional brethren in supporting that charitable institution, which was so very deserving of assistance. He was convinced, however, that the more its objects became known, the more would subscriptions to it be increased. He conceived that every medical man who received a salary would, if he considered the matter, give some subscription to show his good feeling.

The resolution was then adopted.

Dr. Evory Kennedy moved a vote of thanks to the various branches in the provinces for their continued exertions on behalf of the Society. He congratulated the Society on the success which had attended it that year. There were 79 applications answered favourably in sums varying from £5 to £35. The example of their President was worthy of imitation by gentlemen occupying a high position in the profession, and he would suggest that the future Presidents of the College of Surgeons and the College of Physicians should give, at least, half as much as the Chairman had done.

Dr. Greene seconded the motion, which was adopted.

Dr. Johnson, Kilkenny, proposed a vote of thanks to the morning papers and several provincal journals for the important services which they had rendered to the society.

Dr. Mollan seconded the resolution, which was put and carried.

Dr. Chaplin proposed the appointment of the central committee for the ensuing year.

Dr. Croker seconded the resolution, which was agreed to.

Dr. Tufnell proposed the next resolution, empowering the trustees to invest the funds of the society in such securities as they might think advisable. He observed that by withdrawing their funds from the three per cents. and investing them in Bank Stocks, or East Indian Stocks, they would derive a larger income and be enabled to act more liberally.

Dr. Duncan seconded the resolution, which was then adopted.

Dr. Mackesy was then called to the second chair, and a warm vote of thanks was passed to Dr. Butcher for his dignified conduct while presiding, and for his handsome donation, after which the meeting separated.

FOURTEENTH ANNUAL MEETING OF THE IRISH MEDICAL ASSOCIATION.

The annual meeting of the members of this Association took place on Monday week, in the Hall of the Royal College of Surgeons,

Dr. Mackesy in the chair.

There was a large attendance, and amongst those present were—Drs. Quinan, Ledwich, O'Rorke, M'Iver, Ardel, Mason, Marks, Ledwith, Kingstown; Beatty, Morrogh, H.M. Madras; Jacob, Maryborough; Thornhill, M'Clintock, Walsh, Kinahan, Armstrong, Hanrahan, Mackesy, Martin, Johnson, Mapother, Darby, Darley, Bodkin, Tuam; Chaplin, Brassington, Labatt, Macnamara, Sharkey, Bradshaw, Greene, Walsh, Smythe, Purefoy, Quinlan, Hethringham, O'Brien, Slevin, Longford; Jacob, Davis, Hayden, Benson, Carte, Tufnell, Shannon, H. T. Croly, Gogarty, O'Farrell, Coulton, Wharton, Benson, jun.; Maurice Collis, Chapman, Grimshaw, Murdock, &c.

The Chairman said he was happy to see so many familiar faces around him upon this occasion. The report prepared by their zealous and excellent secretary, Dr. Quinan, gave admirable information on the various concerns of the Society, and left very little for him to say. He believed that this Association was the first public body that called the attention of the General Medical Council to the necessity of students having a proper preliminary education; and this was done at a meeting held in 1865. The views contained in the resolution passed at that meeting had been so generally adopted by the Council recently that he could not but congratulate the Association upon having given a tone to the Medical Profession of the United Kingdom upon this important subject. He then read the report, which appeared in our supplement last week.

Dr. Albert Walsh said the duty devolved upon him of moving the adoption of the report so ably drawn up by their indefatigable Secretary. The first point of importance to which it referred, was the necessity for superannuation allowances for dispensary medical officers, who had become worn out in the public service. This was a matter of great importance to the profession, and he urged on them all to use their exertions collectively and individually in every proper way, and to use their influence with Members of Parliament, with the view of having this measure of justice granted. The only fund to which at present dispensary medical officers could apply, after they had

been worn out in the discharge of their duties, was the Medical Benevolent Fund. The utmost that, however, could grant, was only £30 a-year, and that was a very poor thing for the family of such a man to look to. The next point was with respect to medical witnesses. Their Secretary had waited in reference to this matter upon the public officer at the Castle, and upon Mr. Collis, the rating master, who was the son of the late Professor Collis. That gentleman was certainly anxious that medical officers of dispensaries should be properly compensated upon such occasions. Having referred to some other matters of detail relating to the affairs of the Society, he concluded by moving the adoption of the report.

Dr. DARBY seconded the motion. He stated that the question of superannuation was one of great importance to the profession. Men in high official position had objected to it on the ground that medical officers of dispensaries did not give their entire time to the public service, and that it was a rule of the Treasury to give superannuations only in such cases; but he contended that dispensary medical officers had more of their time engaged in the discharge of their duties than many officers in various departments of the public service. The dispensary medical officer was always at his post, and it was erroneous to say that they were not entitled to receive superannuation because they did not give their whole time to their dispensary. He thought that if they worked together and pressed this matter properly they would secure simple justice. Besides, these medical officers had spent the best of their lives in the service of the public, and he urged that the interests of the poor were largely involved, for if superannuation were not granted, the result would be that men having nothing to look to for their support but their salaries, would continue to hold their positions longer than they were physically able to do so. As to the question of consultation fees, he had been for years in the habit of calling in the assistance of his brother medical men, and the Board of Guardians had never refused to pay the fee. He was of opinion that the Poor-law Commissioners, especially the Medical Commissioners, were entitled to their best thanks. It was stated that the police in various parts of the country were issuing tickets for dispensary medical assistance, but it was a very great mistake to suppose that the police had legally any such power. Dr. Darby concluded by paying a warm tribute of regard to the memory of Dr. Bannon.

Dr. PUREFOY mentioned that he had been summoned by visiting tickets issued by policemen to attend upon cases of assault, &c. He had also known books of tickets to be placed in the hands of railway officials. These proceedings were contrary to the Medical Charities' Act.

Dr. D. JACOB mentioned an instance in which he had, with considerable difficulty, established a principle of a consultation fee being allowed.

Dr. HANRAHAN stated that he had been frustrated in an effort to establish the principle of consultation fees for brother medical men.

Dr. A. H. JACOB entered into some details respecting a proposition to make the MEDICAL PRESS the organ of the Association, and after some remarks from Dr. Chaplin, of Kildare, and Dr. O'Rorke, of Enniscorthy, the report was adopted.

Dr. ARMSTRONG moved the next resolution as follows:—

"That we persevere in our efforts to procure a retiring allowance, or a compensation for poor-law and dispensary medical officers when incapacitated by old age or loss of health in the performance of their duties as public servants."

He contended that it was not fair to object to the granting of superannuation on the ground that dispensary officers had an opportunity of supplementing their salaries by private practice. He mentioned a number of instances of public servants who had similar opportunities of supplementing their official salaries, and who gave less time to the public than dispensary officers. He impressed upon the Association the necessity of using every means in their power to accomplish this great object.

Dr. QUINAN read a form of petition to Parliament, which had already, he said, been circulated and presented to Parliament.

Dr. DARLEY seconded the resolution. He referred to the fact that half the salaries of medical officers had been recently charged upon the Consolidated Fund, and a great obstacle in their way heretofore in inducing Boards of Guardians to accept the principle of superannuation was the fact that the whole of the salaries were charged upon the poor rates. Now that the law was so very materially altered in this important respect, it would greatly facilitate their future exertions in this point. Referring to the question of tickets, he said the Board of Guardians were entitled to appoint wardens, who were thereby legally qualified to distribute tickets applying for medical help, but he pronounced it an unwarrantable and improper proceeding, as well as a great hardship, to oblige the medical officers to attend upon tickets issued in the way mentioned.

The resolution was put and carried.

Dr. JACOB moved the third resolution as follows:—

"That the Medical Reform Act, as carried out by the Medical Council has failed in securing for the Medical Profession the advantages originally intended, and that no adequate return has been given for the expenses incurred. We, therefore, suggest that a *uniform curriculum* of high preliminary education and of professional and scientific study be adopted for all licensing bodies, empowered under the act to grant licenses or diplomas in medicine or surgery, as the best means of maintaining the respectability and status of the profession, and of securing to the public competent practitioners in medicine and surgery."

He dwelt upon the necessity and importance of a good preliminary education on the part of persons seeking to join the profession. He regretted to say that many of the village doctors of Ireland were not so educated and qualified as to raise the status of the profession. He also complained that a medical man, a member of the Association, had written to a public body offering to discharge the duties of medical officer for nothing.

Dr. COLLIS seconded the resolution. As a clinical teacher he said he found his most laborious efforts to impart instruction to some of the young gentlemen who came before him futile, owing to their inability to take in and put together two ideas. The powers of memory, comparison, and observation, were what all cultivated. He was afraid, however, that the matter resolved itself into a question of money, and the best class of young men adopted more promising professions.

The resolution was put and carried.

Dr. MARTIN, of Portlaw, said it was but fair that they should have some regard to the interest of their professional brethren in the army and navy. He felt a deep interest in it because he had a son in the service and another going into it. He regretted to say that the suggestions made by the late committee of inquiry into the department had not been carried out to the fullest extent. From a return made to the House of Commons it appeared there were 697 assistant-surgeons in the British army, and he regretted to say that promotion in the service was extremely slow. The profession should, therefore, endeavour in every way they possibly could to assist them and advocate their claims. After a service of twenty-five years it was but fair that they should get a reasonable retiring pension. He moved a resolution to the effect that it was to be regretted that the suggestions of the committee on the state of the medical service in the army and navy have not been carried out with a view of providing a proper retiring allowance for the army medical officers, and affording promotion after a certain amount of service, as such was the only course by which they could secure the service of qualified medical men. It was important that the army should have the services of qualified medical men, especially when serving abroad, when they could obtain the services only of the medical officer of the regiment.

Dr. MOROUGH seconded the resolution.

The resolution was put from the chair and adopted, the Chairman observing that, as an old Medical Officer, he had much pleasure in putting the resolution.

Dr. MARTIN then moved a resolution to the effect that the portrait of the late Dr. Kinsley, of Roscrea, the founder of the Medical Benevolent Fund Association, should be placed in a better position than it at present occupied in the College of Surgeons. His memory was deserving of some memorial.

Dr. BRADSHAW, of Bansha, seconded the motion, which was adopted.

Dr. SMITH, of Castletown, moved a resolution to the effect that the present unsatisfactory state of the law with regard to the remuneration of medical witnesses summoned by the Crown rendered it desirable that one uniform scale of payment should be adopted. They were entitled to two guineas fee for attendance in a court of justice, and reasonable expenses.

Dr. DARBY, of Bray, explained the principle on which the law courts acted in reference to the payment of medical witnesses. Every medical man was bound to give evidence for one guinea, who had to come only ten miles, but if beyond that he was entitled to three guineas.

Dr. SMITH said that on poor-law investigations and constabulary investigations medical men were liable to be examined without any remuneration being given, which had occurred to himself.

Dr. BRADSHAW seconded the resolution, which was adopted.

Dr. QUINAN stated he had an interview with one of the taxing-officers of the higher courts on the subject. He had informed him that the judges had determined on a scale of fees, which, though not actually legal, was at present the practice. It allowed two guineas a-day to strangers coming to give evidence, and one guinea with hotel expenses and first-class travelling fare. In the sessions court the arrangement was different, as the matter lay with police and castle authorities. There was at present a Bill before Parliament for the regulation of fees, and it was to be hoped the scheme would be satisfactorily settled.

Dr. MOROUGH moved a vote of thanks to the Poor-law Commissioners for having come to the rescue of dispensary medical officers with regard to the miserable pay offered by the different boards of guardians to dispensary doctors for the zealous and devoted performance of their duty in the late outbreak of cholera. It was one of the first instances in which the Poor-law Commissioners threw the shield of their protection over the medical officers.

On the motion of Dr. DARBY, the officers for the ensuing year were appointed, Dr. Mackesy as president.

Dr. ARMSTRONG moved a resolution in reference to the necessity of Parliamentary legislation for the medical profession. Continued experience proved the paramount importance of Parliamentary representation for the profession, and that the council be requested to take immediate action on the subject.

Dr. LEDWITH, of Kingstown, seconded the resolution, which was adopted.

A vote of thanks was passed to the press.

Dr. MOROUGH having been called to the second chair, a vote of thanks was passed to Dr. Mackesy.

The meeting then separated.

KING AND QUEEN'S COLLEGE OF PHYSICIANS IN IRELAND.

SECOND QUARTERLY EXAMINATION, 1867.

SECOND DAY.

PRACTICE OF MEDICINE.

DR. W. MOORE, Vice-President.

1. Describe the disease termed Diphtheria, and the form of paralysis which occasionally supervenes.
2. Symptoms, physical signs, and pathology of cerebro-spinal Meningitis?
3. Symptoms, physical signs, and pathology of acute pericarditis?
4. What are the symptoms, physical signs, and the most generally received pathology of the disease termed "Exophthalmic Goitre?"
5. Describe the eruptions met with in typhus and typhoid fevers respectively.

MIDWIFERY.

DR. JENNINGS, Censor.

1. Describe the fœtal circulation; and explain why, during intra-uterine life, the left lobe of the liver is larger than the right.
2. Describe the pathology of the disease termed "cyanosis," its symptoms, and result.
3. Enumerate the various means and agents for inducing uterine action.
4. Enumerate, in their ordinary order of origin, the symptoms of pregnancy; classify them, and state which are the most valuable.
5. Describe the management of the third stage of labour; give also the possible causes of delay, and the treatment suited to each.

MATERIA MEDICA AND MEDICAL JURISPRUDENCE.

DR. BELCHER, Censor.

1. Enumerate the "Glycerina" of the Pharmacopœia (1867); their respective compositions, and therapeutic uses.
2. What is Kamala? Give its therapeutic use, dose, and mode of administration.
3. Write a Latin prescription, with directions for use, in words at full length, and without symbols, for an eight-ounce diuretic mixture for an adult.
4. What conditions and diseases are sometimes mistaken for pregnancy; and how would you distinguish them from it?
5. Enumerate the symptoms and appearances of poisoning by Hydrocyanic Acid; and state the quantity required to destroy life.

PRACTICE OF MEDICINE.

DR. GORDON, Censor.

1. What are the symptoms and physical signs of acute tuberculosis?
2. What diseases is it most liable to be mistaken for?
3. What are the symptoms produced by the passage of a gall stone; and how would you treat them?
4. Give the symptoms, effects, and treatment of pertussis.
5. What is the pathology of "Addison's disease," and what are its symptoms?

SECOND QUARTERLY EXAMINATION FOR LICENSES IN MIDWIFERY.

MIDWIFERY, &C.

DR. RINGLAND.

1. Specify the several axes of the pelvis.
2. Enumerate the various planes of the pelvis engaged in parturition.
3. Contrast presentations of hand and foot; and state the respective diagnosis and treatment.
4. Define the several terms—menstruation, amenorrhœa, dysmenorrhœa, and menorrhagia.
5. In displacements of the uterus, what is the difference between versions and flexions?

MIDWIFERY.

DR. JOHNSTON.

1. At what period of natural labour is assistance required? Describe the nature of that assistance.
2. In which stage of tedious labour is danger to the mother most to be apprehended, and why?
2. Under what circumstances is the employment of the forceps warranted; and what are the particulars necessary to be ascertained prior to their application?
4. Describe the method of using the forceps when the head is low down in the pelvis, and what are the precautions to be observed in order to prevent injury either to mother or child?
5. What are the symptoms which, during labour, would lead to the suspicion that rupture of the uterus might take place; and what would the treatment be under the circumstances?

MEETING OF THE GENERAL MEDICAL COUNCIL OF EDUCATION AND REGISTRATION.

(Continued from page 545.)

MONDAY, JUNE 3.

THE following report from the Pharmacopœia Committee was read :—

"The Pharmacopœia Committee, in completing the duty assigned to them, have to report that, in accordance with the resolution of the Council, May 26, 1866, the Pharmacopœia was submitted to each Member of the Council on Feb. 1, 1867 ; that the final revision of the Pharmacopœia was completed at the end of March during the present year; and that the revised copy was forthwith placed in the hands of the Executive Committee, by whom the work has since been issued to the public.

"The Committee beg to report that in the progress of the work they have endeavoured to limit the expenditure on its production, so far as was consistent with its completeness, its accuracy, and perfection. The amount of this expenditure has been £676, 14s., composed of the following items :—

Editors, ...	£550	0	0
Pharmaceutical investigations, .	100	0	0
Expenses of attendance of Member of Committee for Ireland, . .	25	4	0
Postages, Messengers, Parcels, French Codex, &c., . . .	1	10	0
Total, ...	£676	14	0

"The Committee, reminding the Council that the sum of £300 was placed at their disposal in 1865, have now to ask that the Treasurers be authorized to pay the further sum of £376, 14s.

"Having thus brought their labours to a close, the Committee have the satisfaction of testifying to the very valuable services rendered by Professor Redwood in the preparation of the work, to his zeal and his ability, not less than to the readiness with which he gave attention to the suggestions and recommendations of the Committee. They have also to acknowledge the valuable assistance rendered by Mr. Warrington, so far as the state of his health enabled him to co-operate with the Committee ; acknowledgments are further gladly offered by the Committee, for the assistance afforded them in the revision of the work, not only by Members of the Council, but also by the several eminent scientific gentlemen to whom the work was submitted before its publication.

"The Committee feel that it will not be thought inconsistent with their duty, to indicate the plan which seems to them the most desirable for watching over the progress of pharmacy, and for making such additions and corrections as would facilitate hereafter the preparation of the next edition of the British Pharmacopœia.

"They would therefore suggest that a Committee, constituted like the present, should be appointed for the purpose just indicated, and that the sum of £50 be placed annually at their disposal to enable them to obtain such assistance as they might think necessary.

May 31, 1867. "R. CHRISTISON, Chairman."

It was stated by the Registrar, that about 7000 copies of the work had been sold within a few weeks, the entire edition printed being 20,000.

Dr. ANDREW WOOD moved, Dr. A. SMITH seconded, which was agreed to :—

"That a sum of £500 be voted to the Members of the Pharmacopœia Committee for their great services in preparing the Edition of the British Pharmacopœia for 1867."

It was then moved by Sir D. J. CORRIGAN, seconded by Mr. HAWKINS, and agreed to :—

"That letters be addressed to the University of Melbourne, the University of Calcutta, the University of Sydney, and the Registrar of the Medical Council of Upper Canada, informing them that at present it is not legally in the power of the General Medical Council to recognize Colonial Degrees, but that an amended Medical Bill is now engaging the attention of the General Medical Council, and that the recognition of the Colonial Degrees and Licences referred to shall receive full consideration."

A petition was read from Mr. Richard Organ, whose case has been so often before the Council, and who had been struck off the register in consequence of having fraudulently obtained his diploma, to be allowed to present himself for examination at one of the examining bodies.

In reference to this petition, Dr. STORRAR moved, and Sir. D. J. CORRIGAN seconded :—

"That the Council, having considered the application of Mr. Richard Organ, see no cause to alter their decision of the 19th May, 1866."

The following amendment was then moved by Mr. HARGRAVE, and seconded by Mr. RUMSEY :—

"That as Mr. Richard Organ has confessed his improper conduct, and as he has repeatedly thrown himself on the leniency and clemency of the Council, he be permitted to present himself for examination before one of the licensing bodies."

The amendment was negatived.

Second amendment, moved by Dr. THOMSON, and seconded by Dr. ACLAND :—

"That the application of Mr. Richard Organ, together with the accompanying documents, be referred to a Committee, to examine and report upon to the Council."

The Committee to consist of Dr. Thomson, chairman ; Dr. Acland ; Dr. Embleton ; Dr. Alexander Wood ; Mr. Syme ; Dr. A. Smith. The amendment was carried, and, having been put as a substantive motion, was agreed to.

A motion by Dr. PAGET—

"That the application of a medical student for registration, be accompanied by a *certificate* of his place of medical study,"

Having been put to the vote and negatived, the Council adjourned their sittings at six o'clock.

TUESDAY, JUNE 4.

The Council having resumed its sittings at the usual hour,

The President laid before the Council a letter which he had received from Mr. Walpole, in answer to the application that had been made to him, which was as follows :—

"Balmoral, June 1, 1867.

"MY DEAR SIR,—I have just received your communication from the Medical Council, respecting the Amendment of the Medical Act.

"As I am no longer the Home Secretary, and, in point of fact, am not likely to be in London for some days, I have thought it best to send your communication on at once to Mr. Hardy.—Yours ever very faithfully,

"(Signed) S. H. WALPOLE.

"To Dr. Burrows."

Dr. ACLAND suggested that, as no time should be lost in bringing the matter before Her Majesty's Government, he would propose—

"That the President be requested to ask Mr. Gathorne Hardy to appoint a time for receiving a deputation from the Medical Council, with respect to the Medical Act."

This having been assented to, the President quitted the chair—returning again shortly—to inform the Council that Mr. Secretary Hardy had consented to receive a deputation from the Council on Thursday at half-past twelve o'clock.

Dr. ACLAND then rose, pursuant to notice, to propose the following motion, which was seconded by Dr. STOKES :—

"That it is desirable that the General Medical Council shall have power to combine with any of the Licensing Bodies mentioned in Schedule (A) of the Medical Act, in conducting Examinations, by the appointment of *Assessors, Visitors, or Examiners,* conjointly with such bodies, in such number and with such duties as shall be agreed upon

between the Council and the bodies agreeing to conduct such joint examination; that the examiners, assessors, or visitors so appointed shall not be members of the Council, and shall be paid in such manner and at such rate as the General Council, subject to the approval of the Treasury, shall decide; that the qualification so conferred may be entered in the *Medical Register;* that if the qualification so conferred shall be granted after examinations in medicine, in surgery, and in midwifery, it may be accepted by any public bodies who have heretofore required a so-called 'double qualification;' that nothing in this qualification shall debar the holder from obtaining the further title of Physician, Surgeon, Doctor, Master in Surgery, or Fellow of any College, or the like, on such terms as the bodies mentioned in schedule (A) respectively may determine; nor from obtaining separate qualifications from such bodies, as at present."

Dr. Acland introduced the foregoing motion in a most able and elaborate speech, stating his opinions of the absolute necessity that some such measure should be adopted, as it would be of immeasurable benefit to the licensing bodies and the profession at large. Our space being limited, and the proposal having been deferred for a future occasion, we must refrain from introducing the speeches made till this important subject shall again occupy the attention of the Council.

The proposal of Dr. Acland was then superseded by the following amendment moved by Mr. Rumsey, and seconded by Dr. Leet:—

"That a Committee be appointed to consider the motion of Dr. Acland, and report thereon to the Council at or before their next Session."

The amendment was carried, and the Council adjourned at the usual hour.

Wednesday, June 5.

Dr. Paget rose, pursuant to notice, to propose the following motion:—

"To adopt the following amendment of clause XI. of Medical Acts Amendment Bill, proposed by Medical Acts Amendment Committee:—

"It shall be lawful for the General Council, by special orders, to dispense with such provisions of the Medical Acts, or with such part of any regulations made by authority of the said Acts, as to them shall seem fit, in favour of persons who shall make application to be registered under the said Acts on Foreign or Colonial Diplomas or Degrees: provided such persons shall have resided in the United Kingdom for a period of not less than twelve months immediately previous to making application to be registered: provided the holders of those Diplomas or Degrees have the right to practise Medicine and Surgery in the countries where they have been granted: and provided the Council shall receive satisfactory evidence that those Degrees or Diplomas, or Licences to practise, have been granted after a course of study and examinations such as to secure the possession by persons obtaining them of the requisite knowledge and skill for the practice of their profession."

He thought this clause might be divided into three parts. First, that it would give those gentlemen now in England, possessing Foreign or Colonial Diplomas, the opportunity of presenting themselves to be registered, and if found worthy, be permitted to enjoy the same privileges as those now practising as duly qualified practitioners. The second part of the clause, being but a repetition of the provision proposed by Sir George Grey, when he was Home Secretary, it would not be conceived, opened the door for any irregularities, by allowing those in the possession of other Diplomas than those obtained through the Licensing Bodies of Great Britain, to be put on the Register, whether they were deserving or not, as it was a well-known fact that, although the possession of these Foreign Diplomas was a warrant for the teaching of medicine, it did not necessarily give the holders the privilege to practice, unless they had gone through the proper course of study and examination; and this he considered to be one great protective measure gained. Thirdly—He thought the Council were alone capable of judging who was worthy to be placed upon the Register, and they would certainly not accord this privilege to any man, no matter with what degree he might be in possession of, unless they received satisfactory evidence that the degrees or diplomas had been granted him after a proper course of study and examination. He would therefore propose the adoption of the report as it stood.

Mr. Cæsar Hawkins begged to second the motion. He thought it was the best way of meeting the question that had been so often raised. The original proposal of Sir George Grey was exceedingly objectionable, and one which they could not possibly adopt. The present Government having imposed upon them the necessity of introducing a measure for the admission of those in possession of a Foreign or Colonial Diploma to the Register before the new Medical Bill could become law, he thought the proposed clause by Dr. Paget a very admirable one, and he had therefore great pleasure in seconding it.

Sir Dominic Corrigan was very sorry he must rise to oppose this measure. Dr. Paget had stated that it would be impossible for Foreign Graduates to pass the examinations here, and that therefore we must give them other facilities, in order to allow them to the practice of Medicine and Surgery. Now, he (Sir Dominic) maintained that this was the very reason why the clause was objectionable, as it gave facilities for foreigners to come over here and obtain a licence, with but little trouble, on account of the liberality of our system, whilst to the young men of our own country it said as much—"You go over to any of the little petty Universities of Germany—the journey will only cost you about £3; you can there obtain all you want for a very small sum—for they were much in want of money in Germany, and the degrees can be purchased with little or no examination whatever. You can then return home, be received by us, and placed on the Register as a properly-qualified medical man." He thought it possible, that if the present clause, at least the latter part of it, passed, the whole of the licensing bodies might enter into a conspiracy not to recognise a foreign diploma of any kind. He contended there was a great distinction to be drawn between the words, *foreign* and *colonial*, and he would, therefore, treat them in separate clauses. They had abundant opportunity of ascertaining what the colonial diplomas were, they well knew them to be genuine; they were acquainted with the mode of examinations pursued in such Universities as Melbourne, Montreal, &c., and there was consequently but little cause of fear to be apprehended by the admission of colonials to the Register. But with foreign it was a totally different thing; the Council had no means of ascertaing how these diplomas had been obtained, or under what circumstances they had been granted; they could not possibly arrive at the conclusion that the examinations had been honestly conducted, unless they sent over a commissioner to each in order to ascertain the real state of the case; and, even then, it might be contrary to the laws of the country to admit of such enquiries. They did not know the laws of foreign countries; they had no control over the Universities of those countries—if therefore they gave foreigners the privileges which, in their respective countries, were denied to Englishmen, they conferred on them a position and a rank they had never had before, absolutely allowing them to hold public appointments which they could not obtain at home.

Sir Dominic continued—Suppose we take the Universities of Germany, where they were as thick as mushrooms, or America, where they were so numerous that their numbers were unknown, what were the diplomas obtained at these places worth? Why, if they excepted such as those of Berlin, Vienna, and one or two others, they were not worth a straw; and he maintained that if the Council gave its sanction to the resolution proposed, at least in its present form, it would stamp the whole of our licensing bodies with degradation.

(For continuation, see Supplement.)

Correspondence.

ST. ANDREWS GRADUATES.

TO THE EDITOR OF THE MEDICAL PRESS AND CIRCULAR.

MR. EDITOR,—Allow me to notice a mistake which you have inadverdently fallen into in your leading article, in your last number, regarding the Medical Graduates of St. Andrews University. The strict and searching examination of medical candidates was instituted and acted upon subsequent to the appointment of the late Dr. John Reid, a very eminent anatomist and physiologist, to the Professorship of Medicine in the University of St. Andrews, and during his whole incumbency, and was continued after Dr. Day became his successor. No doubt Dr. Day very successfully managed to rouse a great increase in the number of applicants for the degree, who may perhaps boast of being "*Day's Graduates*," but the character of the examination was secured by the University appointing additional qualified examiners from the Lecturers of the Colleges of Physicians and Surgeons of Edinburgh, the Faculty of Physicians and Surgeons of Glasgow, and of the Andersonian Institution, from which bodies they are still selected by the University Court. I cordially support the views you have advanced, and trust that the "St. Andrews Graduates' Association" may succeed in getting an alteration in the restriction to 1863 as in the Bill, and that "all medical graduates who have passed a sufficient medical examination since 1840, or who shall still pass such an examination, irrespective of residence, shall be entitled to be registered as members of the University General Council, and as such entitled to vote for the representative in Parliament."—I am, &c.,

W. M.

THE LATE ELECTION AT THE ROYAL COLLEGE OF SURGEONS, IRELAND.

TO THE EDITOR OF THE MEDICAL PRESS AND CIRCULAR.

SIR,—In your impression of the 5th inst., under the heading "The Election of Council of the Royal College of Surgeons of Ireland," a passage occurs which (most unintentionally, I am sure, does me but scant justice with reference to my recent candidature for the Vice-Presidentship of the College. The passage I allude to runs thus:—"For the Presidency, Mr. Adams and Mr. J. Hamilton competed, while for the Vice-Chair, Mr. Porter offered himself. Mr. Macnamara also had laid his pretentions to the Vice-Chair before the electors, but subsequently withdrew from his candidature." Now, although all the Fellows of the College (through a circular issued by me to them) are aware of the full facts, still, as many of your readers, not being Fellows, and, consequently, not having had addressed to them my circular letter, most likely are still in ignorance of the full particulars of the case, you would oblige me by giving insertion to the enclosed letter, a copy of which each elector received *before the day of election*.

Next year *(D.V.)* I purpose placing my pretentions before the Fellows of the College for their consideration, and from the numerous kind communications, both written and oral, that I have received from a great number of them both previous and subsequent to the last election, I entertain no doubt of my claims receiving more than their due share of attention at their hands.—Very faithfully yours,

RAWDON MACNAMARA.

[COPY OF CIRCULAR LETTER.]

MY DEAR SIR,—On Tuesday last I did myself the honour of forwarding you a card, announcing my intention to seek the post of Vice-President of the College of Surgeons. I think it due to you, as to myself, to explain the circumstances under which I sought that distinction at your hands, and why it is that I am now resolved *not* to go forward in my canvass.

On the death of my deeply lamented friend, Dr. Awly Banon, V.P. of the College, being announced, Mr. Porter put down his name on the College list for the *Presidentship* instead of the Vice-Presidentship of the College, the post for which he had been previously canvassing, and I then put down my name for the Vice-Presidentship. Since then Mr. Porter has seen fit to change his mind, and is now again a candidate for the *Vice*-Presidentship; and as it would be the last thing that would enter my mind to contest the office with my old and valued friend and colleague, I have removed my name from the list of candidates for the post, and shall feel only too satisfied if you deem me worthy of re-election, on Monday next, to the office of one of your Council.—Your obliged and grateful servant,

RAWDON MACNAMARA.

THE DANGERS OF INJUDICIOUS BATHING.

TO THE EDITOR OF THE MEDICAL PRESS AND CIRCULAR.

SIR,—As the bathing season has now commenced, a few words of caution on the subject may be of great service, if you will kindly allow me to suggest, through your columns, a very simple means of preventing the great risk to health and life so constantly incurred, through ignorant and injudicious bathing.

It is a matter which would seem to come properly within the province of the local Sanitary Committees, to take all necessary means to guard from such dangers, those persons who crowd our coasts during the summer months, for the purpose of sea-bathing.

It is a fact too little known, that to bathe without suitable precaution, is to hazard the most imminent peril. Any one who could be so reckless as to place himself voluntarily under the wheels of a vehicle in motion, would be properly regarded as insane; but the folly of the act is not less in those persons who complacently plunge into a bath soon after partaking of a full meal, thus risking sudden death from congestion, or some other fatal mischief. Numbers of bathers who escape a calamity of that description, are nevertheless sufferers from their imprudent mode of immersion; shiverings, headaches, and other symptoms, often succeed the use of the bath, yet the true cause is rarely suspected; probably the bather perseveres with the cold bath, under the vague impression that it may prove a remedy for those unpleasant sensations, which it is all the time increasing.

My suggestion is this—Let notices, headed "Caution to Bathers," be put up in a conspicuous spot, near all bathing-places. The notices should contain the following hints and suggestions:—"It is requested that no person will bathe within two hours after partaking of a meal. It is desirable that all persons should consult their medical adviser before taking a sea bath, as to the need or benefit of doing so."

Notices of this description might also be hung up in all bathing machines.

The bath attendants should be well instructed upon the laws of hygienic bathing.

The cost of such a plan would be very insignificant, considering the benefits likely to result from its adoption. A season never passes without furnishing numerous instances of the risks incurred in consequence of ignorant and injudicious bathing. A case of the kind was reported last week; it occurred in a public bath. A young man, after swimming a short distance, was observed to lose consciousness, and upon medical aid arriving, life was pronounced extinct. "Apoplexy" was said to be the cause of the fatal result; but, if enquiry had been pushed further, "imprudent bathing" might have been shown to have induced the seizure.—I am, sir, yours obediently,

SANITAS.

P.S.—These "hints" might have a wider usefulness, if the daily and weekly press would kindly reprint them, for the benefit of general readers.

"THE OUTCAST."

TO THE EDITOR OF THE MEDICAL PRESS AND CIRCULAR.

SIR,—In reading an article, "The Outcast," in your CIRCULAR, I could not help being struck with the soundness of your suggestions, and I think if they could be carried out, a great diminution of sickness, poverty and crime, would be the happy results.

These poor deserted little street arabs are indeed a misery to themselves, and a perpetual curse to society. Having no home and no friendly hand to guide them, they commence at an early age to beg or steal for their existence, and soon grow up to be desperate ruffians and adult thieves.

Residing in a densely populated neighbourhood, near the docks, I am more acquainted with the hovels of misery and crime which abound, than my more fortunate professional brethren at the west end, and I can therefore speak from personal experience on the subject. When we remember there are at least 20,000 of these little pests wandering about the streets of London alone in filth and rags, and oftimes with disease which communicates itself wherever they go, it does indeed seem more than ever necessary that immediate steps should be taken in order to ameliorate their present sufferings and conduce to their future welfare, by initiating some such a movement, as suggested in your remarks.

Much good has resulted by Ragged Schools and Refuges, and my experience in these matters induce me to remark that, as I have found the majority brought together in this way have not sunk so far below the level of civilization, as to be incapable of good impressions, I think if this movement could be

so far extended as to be made compulsory in the way you suggest, much sickness and still more vice would be prevented. I always find, in my professional capacity, easy access can be gained even to the lowest haunts of vagabondism. The "Doctor" is with them a necessity, upon whom they look as a friend when the "Parson" is denied admittance. And I therefore think that were we to put our shoulders to the wheel, our chances of success would not be remote.—I have the honour to be, sir, yours, &c. W. U.

Medical News.

At a congregation held at Oxford, on the 7th inst., the following degree was conferred—M.D., *comitatis causa*, George Frederick Elliott, Trinity College, Dublin.

The Case of Jordan.—At the Marlborough-street Police-court, on Tuesday, Jordan was fined £20 *pro forma* under a summons taken out by the Royal College of Physicians, Edinburgh.

Cod Liver Oleine—for Hospital Use.—Messrs. Bedford Brothers, whose Oleine we recently noticed, have made arrangements which will enable them to supply hospitals and other public charities with a cheaper article of the kind. The Cod Liver Oleine for hospital use is stated to differ from the so-called Crystal Cod Liver Oleine, inasmuch as it contains a little more solid fatty matter. No doubt many gentlemen in hospital practice will make a trial of the article, and the profession will thus be placed in possession of facts respecting its value.

Crinoline again.—Mr. Humphreys, the coroner, held an inquest on Thursday on the body of a woman aged twenty-one years, who lost her life through wearing crinoline. She approached within a moderate distance of the fire to put some fuel on, but the crinoline had so distended her dress that it caught fire.

Royal Zoological Society of Ireland.—The Society's Gardens, now in their most beautiful garb of Spring foliage, attracted, during the week ending on Thursday last, more than four thousand visitors. On Sunday the grounds and houses were crowded with sightseers. The Council of the Society have purchased a male and female Wallaly Kangaroo, which, with their young one, are now in the Gardens, and form a principal attraction. The little stranger has only just made its public appearance, though it was born about eight months ago, during which period it has been carried by the mother within her mammary pouch. The Kangaroo is a native of Australia, and many efforts have been made to acclimatise it in Europe, with varying success. The hind feet are very large, and armed with long and powerful toes. With these members the animal, when hunted, bounds along in enormous jumps, and, if overtaken, defends itself, often killing dogs with a single blow. The fore-legs are remarkably small, and are principally used for seizing its food. The Kangaroo may be said to have a fifth leg, for it possesses a very large and muscular tail, on which, it sits when at rest, as a milk-maid does on her milking-stool, and which, in progression, serves as a rudder to direct the animal's movements. The young are produced in an extremely imperfect state, and remain for eight months after birth within a pouch attached to the maternal source of nourishment. The baby Kangaroo now at the Gardens, has just emerged from its shelter, and, as seen hopping in and out of its lodging, is an object of great interest. The Society has also received within the week three very fine Rheas, presented by Arthur Healy, Esq., L.K.Q.C.P.I., and two South American Partridge, the gift of William Kemmis, Esq.

NOTICES TO CORRESPONDENTS.

The extent of our condensed Report of the Proceedings of the General Medical Council, and of the transactions of the King and Queen's College of Physicians, obliges us to postpone the following communications:—Letter from *Dr. Mackesy* to the Director General of the Army Medical Department, and Reply.—*Dr. Richardson's* Lecture on the Influence of Cold on the Nervous Functions.—Leading Article on the Appointment of Medical Attendant to the Mountjoy Prison.—*Dr. Little*, Case of Epilepsy.—*Dr. H. M. Jones*, Case of Retained Placenta.—*Dr. Peebles*, Case of Hydated of the Liver.—*Dr. McCormac* on the Production of Anæsthesia by the Vapour of Absolute Alcohol.—Investigations respecting Arterial Dilatation, and Result of Nervous Irritation.—*Mr. Denis Phelan*, Letters on a Poor-law Medical Annuity Fund.—Several Letters, Reviews, &c.

H. W.—We cannot insert your letter without some proof of the facts stated being placed in our hands.

Dr. Chapman.—Your valuable letter in reference to the one on the Treatment of Ague by Heat to the Spine, is unavoidably postponed.

Dr. C. A.—We cannot insert the article.

F. R. S.—Your communication has been handed to the person named.

SYRUP OF QUININE.

Mr. Beckett, of Heywood, Manchester, has forwarded us a bottle of his Syrup of Quinine and Orange. It is a clear syrup, with the taste of Quinine and Orange Peel, slightly acidulated, and professes to contain two grains of the disulphate in each ounce. The usual tests showed that the specimen sent contained the full quantity.

MEDICAL APPOINTMENTS.

Allt.—Nathaniel W. Allt, L.R.C.S.I., L.K.Q.C.P.I., &c., has been appointed Acting House-Surgeon to the Royal South Hants Infirmary, Southampton, in the absence of W. Burt Shorto, Esq.

Bellamy.—Edward Bellamy, F.R.C.S. (Exam.) Demonstrator of Anatomy, Charing-cross Hospital, has been appointed Surgeon to the St. George's and St. James's Dispensary.

Buchanan.—G. Buchanan, M.A., M.B., M.C., has been appointed Demonstrator of Anatomy in the University of Glasgow.

Carter.—A. E. Carter, L.R.C.S.I., L.R.C.P.E., Senior Resident Surgeon of the Northern Dispensary, Liverpool, has been appointed Assistant Medical Officer to the Toxteth Workhouse, Liverpool.

Harding.—T. H. G. Harding, L.D.S.R.C.S.E., has been elected Surgeon-Dentist, to the Islington Dispensary.

Jackson.—Hughlings Jackson, M.D., has been elected Physician to the Hospital for the Epileptic and Paralysed, in the room of Dr. Sieveking, resigned.

Mason.—James Mason, M.D., M.R.C.S. and L.M., and L.S.A., has been elected Surgeon-Accoucheur to the Sheffield Public Hospital and Dispensary, *vice* Samuel Lawton, M.R.C.S and L.S.A., deceased.

Orton.—F. Orton, M.B., has been appointed Resident Medical Officer at St. Mary's Hospital, Manchester.

Osborne.—H. Osborne, M.D., has been appointed Physician to the Islington Dispensary.

Births, Marriages, and Deaths.

Announcements are inserted without charge, and must in all cases be authenticated with the signature of the sender.

BIRTHS.

Barnes.—On the 4th inst., the wife of J. W. Barnes, F.R.C.S., of Perry-hill, Syndenham, prematurely of a daughter.

Butler.—On the 25th ult., at 186, Commercial-road, Newport, Monmouthshire, the wife of John Butler, Esq., L.R.C.S.I., and L.R.C.P.E., of a daughter.

Chambers.—On the 3rd inst, at 22B, Brooke-street, Grosvenor-square, the wife of Dr. T. King Chambers, of a daughter.

Fegen.—On the 3rd inst., at 6, St. Jean d'Acre-terrace, Stoke, Davenport, the wife of W. B. Fegen, staff-surgeon, R.N., H.M.S. *Impregnable*, of a son.

Weaver.—On the 1st inst., at Frodsham, Cheshire, the wife of F. P. Weaver, M.D., of a daughter.

Wilson.—On the 27th ult., at 6, Montpellier-terrace, Cheltenham, the wife of E. T. Wilson, M.B. Oxon., of a daughter.

MARRIAGE.

Harrison—Boxer.—On the 23rd ult., at Lancaster-gate Church, Bayswater, J. B. Harrison, M.B., to Roberta Spencer Thomson, fourth daugher of the late Admiral Boxer.

DEATHS.

Ranking.—On the 3rd inst., W. H. Ranking, M.D., late of Norwich, aged 53.

Ffolliott.—On the 6th inst., at Kilworth, of a severe illness contracted in the discharge of his medical duties, Francis Ffolliott, Esq., M.D., F.R.C.S.I. Dr. Ffolliott was deseended from Baron Ffolliott, who was one of the barons that compelled John to sign the Magna Charta, and his family resided for many centuries at Pyrton, in Worcestershire.

Advertisements.

COD LIVER OLEINE
FOR HOSPITAL USE.

Bedford Brothers, believing that a pure, good and Cheap Cod Liver Oil is one of the great necessities of Hospital practice of the present day, have arranged to supply the demand in the form of a Cod Liver Oleine.

The Cod Liver Oleine for Hospital use, differs only from the Crystal Cod Liver Oleine imported by Bedford Brothers, and now so generally used amongst the wealthier classes, in that it contains a little solid fatty matter, but not sufficient to interfere with its ready digestion.

The Hospital Cod Liver Oleine, like the Crystal Cod Liver Oleine, is tasteless and inodorous.

In Tins, each 15 or 30 gallons (for Hospitals only), at 6s. per gallon.

87, Tower Hill, London, E.C.,
27th May, 1867.

UNIVERSITY LIFE ASSURANCE SOCIETY.
EXTENSION TO FOUNDATION SCHOOLS.

Additions in 1865 at the rate of 1¾ per cent. per annum.

CHARLES McCABE, Secretary.

24, Suffolk-street, London, S.W.

ROYAL COLLEGE OF PHYSICIANS OF LONDON.

FIRST PART OR PRIMARY PROFESSIONAL EXAMINATION FOR THE LICENCE.—The next Examination of Students who have completed Two Years of Professional Study at a recognised Medical School will commence on Tuesday, July 2nd.

SECOND PART OR PASS EXAMINATION.—An Examination of gentlemen who are eligible for admission to the second Examination for the Licence will commence on Tuesday, July 9th.

Registered Medical Practitioners qualified before January, 1861, are admitted to Examination under Special Bye-law.

Candidates are required to give fourteen days' notice in writing to the Registrar of the College, with whom all certificates and testimonials required by the Bye-laws are to be left at the same time.

Pall-Mall East, 1867. H. A. PITMAN, M.D., Registrar.

NATIONAL ORTHOPÆDIC HOSPITAL.

LECTURES ON DEFORMITIES will be Delivered on consecutive Tuesdays, at 4 P.M., commencing May 21st, as follows:—

On Angular Curvature of the Spine. By Mr. T. Carr Jackson.
On Infantile Osteo-malachia. By Dr. Dick.
On Talipes Varus. By Mr. L. Stromeyer Little.

Free to Practitioners and Students of Medicine.
Hospital, Great Portland-street, London. W.
W. C. HARVEY, Hon. Sec.

Apothecaries' Hall of Ireland, 40 Mary- street. The following new Medicines and Preparations are manufactured in the Laboratory on the premises, and a supply constantly on hand:—

THE NEW PREPARATIONS OF THE PHARMACOPŒIA, 1867.
TICHBORNE'S VESICATING COLLODION.

Dr. Richardson's Styptic Colloid; Syrup of Phosphate of Iron, Quina, and Strychnia: Chlorate of Quina; Perchloric Acid; Carbolic Acid, pure and crude (the latter free from Sulphuretted Hydrogen).

ESTABLISHED 1848.
MEDICAL TRANSFER AND PROFESSIONAL AGENCY.
50, Lincoln's-inn-fields, W.C.

Mr. J. Baxter Langley, M.R.C.S., F.L.S., &c. (KING'S COLL.). has now upon his books a large number of desirable investments and available openings for Medical Men commencing their professional career. Gentlemen wishing to relinquish practice can be introduced without delay to competent successors with means at their disposal.

Mr. Langley devotes his prompt personal attention to the negotiations entrusted to him, and treats confidentially and with care all matters relating to professional business. The strictest reserve will be practised in all the preliminary arrangements, and no expense incurred (except in special cases) unless a negotiation be completed.

The general Partnership and Commercial Agency business till recently conducted by him at his City offices, and his experience in his management of large commercial undertakings, combined with his professional acquirements, enable Mr. Langley to guarantee that all matters of business placed in his hands will be carried out without delay, and with an equitable regard to the interests of all the parties concerned. As an arbitrator on all matters of dispute between professional men Mr. Langley has had great experience, and can refer to numerous cases in which he has been the means of preventing expensive and tedious litigation.

Mr. Langley can refer to the Professors of his College, Members of Parliament, Clergy, Merchants, Bankers, and others, as a guarantee of his integrity and honour in all negotiations entrusted to him.

Full information as to terms, &c., sent free on application.

Office Hours from 11 till 4; Saturdays from 11 till 2.

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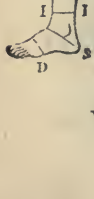

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UNIVERSITY OF LONDON.

NOTICE IS HEREBY GIVEN, that the next Half-yearly Examination for MATRICULATION in this University will commence on MONDAY, the 24th of JUNE, 1867. In addition to the Metropolitan Examination, Provincial Examinations will be held at St. Cuthbert's College, Ushaw; Stonyhurst College; St. Patrick's College, Carlow; Owens College, Manchester; and Queen's College, Liverpool.

Every Candidate is required to transmit his Certificate of Age, to the Registrar (Burlington House, London, W.) at least fourteen days before the commencement of the Examination.

Candidates who pass the Matriculation Examination are entitled to proceed to the Degrees conferred by the University in Arts, Laws, Science, and Medicine. This Examination is accepted (1) by the Council of Military Education in lieu of the Entrance Examination otherwise imposed on Candidates for admission to the Royal Military College at Sandhurst; and (2) by the College of Surgeons in lieu of the Preliminary Examination otherwise imposed on Candidates for its Fellowship. It is also among those Examinations of which some one must be passed (1) by every Medical Student on commencing his professional duties; and (2) by every person entering upon Articles of Clerkship to an Attorney,—any such person Matriculating in the First Division being entitled to exemption from one year's service.

WILLIAM B. CARPENTER, M.D., *Registrar.*
May 31st, 1867.

URGENT APPEAL.

THE Trustees of the Fund which is being raised for the relief of a Medical Man in the West of Ireland (who labours under paralysis, and has Ten young children to support), thankfully acknowledges the receipt of the following contributions, transmitted to them by Dr. McMunn, of Sligo,—in addition to a considerable sum which he collected from non-professional friends:—

	£	s	d
Dr. McMunn, Sligo	5	0	0
Dr. Christian, London	2	2	0
Dr. Lynn, Sligo	2	0	0
Dr. O'Farrell, Boyle	1	0	0
Dr. Harrison, Roscommon, per Dr. O'Farrell	1	0	0
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Dr. Denning, Sligo	1	0	0
Dr. Thompson, Dromahair	1	0	0
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Dr. McMunn, Ballymote	1	0	0
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Dr. Wood, Sligo	2	0	0
Dr. Hamilton, Carney	1	0	0
Dr. Powell, Sligo	1	0	0
Dr. Longhead, Sligo,	1	1	0
Dr. Armstrong, Collooney	1	0	0
Dr. Crean, Brewood, Stafford	1	0	0
Dr. Wood, London	1	1	0
Dr. McDermott, Bath	1	0	0
Dr. Chambers, Deputy Inspector of Hospitals, Halifax N.S.	5	0	0
Dr. J. W. Longhead, 56th Regiment	1	0	0
Dr. J. F. Longhead, Staff Assistant Surgeon	2	0	0
Dr. Murray, Tobercurry	1	0	0
Dr. Wood, Staff Surgeon, Folkestown	1	0	0
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Further Contributions will be thankfully received by the Trustees, Dr. Benson, Captain Hamilton, and George Beamish, Esq., or at the Office of the MEDICAL PRESS AND CIRCULAR.

TESTIMONIAL TO DR. RICHARDSON.

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AT a Large and Influential Meeting of the Medical Profession, held at 37, Soho-square, on THURSDAY, AUGUST 2, 1866, James Paget, Esq., F.R.S., in the Chair, it was unanimously agreed that a Committee should be formed for the purpose of raising a Testimonial to Dr. Richardson, in recognition of his labours and discoveries in the Medical and Allied Sciences. It was further agreed that the entire Committee be empowered to receive Subscriptions from the Members of the Profession and the community in any part of the world who may be desirous of taking part in the Testimonial. It was further considered best that the Testimonial should take such a form as to be not only in recognition of what Dr. Richardson has already done, but a substantial means for encouraging him to pursue those scientific researches which are so useful to the Profession and the public at large.

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Lectures.

CLINICAL LECTURE ON TWO CONTRASTING CASES OF ACUTE ECZEMA.

By C. HANDFIELD JONES, M.B., Cantab., F.R.S.
PHYSICIAN TO ST. MARY'S HOSPITAL.

M. A. W., æt. 22, female, admitted September 9, 1864. When brought into the hospital this young woman was really in a pitiable plight. She was wrapped up in rags, which were more or less soiled with discharge, and adherent to her skin. No clothes could be put on, so that her only outer covering was a sheet thrown around her. She had been ill four and a-half months; the disorder had come on without any known cause. She was worn, feeble, and emaciated. Almost the whole cutaneous surface was red, more or less excoriated, and covered with thin lamellar crusts. The ears and scalp were much affected, in some spots presenting the characters of impetigo. The lining membrane of the eye-lids was very red. The eruption first appeared on the abdomen and breasts, and afterwards extended all over the trunk and limbs. The pulse was feeble, not excited. The urine was pale-coloured, neutral, not albuminous. She was ordered Liq. Potas. Arsenit. ℥ v. + Tr. Cinch. ʒi + Tr. opii ℥ v. + Aq. ℥i. *ter die*, and a lotion containing Liq. Plumbi Diacet. On the 19th ʒOl. Morrh. ʒi *ter die* was added. The dose of Fowler's solution was gradually increased to 7, 10, 12, and 15 minims, and, for some time, a drachm of Rochelle salt was given in water, with Tr. Calumba. ℥ x. *bis die*. The inflamed skin, after being well bathed with the lead lotion, was freely anointed with olive oil, which prevented the linen from sticking to the surface. The eruption was most severe on the back at its upper part, and on the backs of the hands, which were cracked, and scabbed, and sore; and benefit was obtained by washing these parts over with solution of nitrate of silver, gr. x. ad. ℥i. By November 26th, she might be called well. There was scarce any trace of the eruption remaining, but the conjunctivæ were still congested. The pulse was soft, open, 126; she was sitting up. The arsenic was now exchanged for Quin. Disulph. gr. iij. *ter die*. A few gelatine baths were administered, and she went out with an almost perfectly natural integument, December 17th. She remained in very good health until about the beginning of June, in the following year, when a relapse occurred, and she was admitted into the hospital again, July 1st, with severe and extensive eczema affecting the chest, abdomen, back and nates. These parts were covered with thick crusts, beneath which the skin was raw and very red. Pulse 108, full; tongue clean and moist. She looked in much better condition than she had been in on the former occasion. The treatment employed was essentially similar until August 19, when the note is that the eczema is just well, but her eyes are much affected; caustic had been applied to one (not by me) and had caused much irritation. A day or two after this the surface of the chest and arms presented a copious eruption of red papules, coalescing into a continuous red surface about the axillæ. She did not feel notably ill. I directed the arsenic to be omitted, and Magnes. Sulph. gr. xv. + Quin. Disulph. gr. i. + Acid s. dil. ℥ x. + Aq. ℥i., to be taken *ter die*. By September 6th the eruption had declined much, but there still remained a great deal of red spotting and patching of the chest and arms, and the eyes were very red; pulse of fair force. The arsenic was renewed in ℥ x. doses, and raised on 19th to ℥ xv., and on 30th, to ℥ xviij *ter die*.

October 4th. She is reported as doing well, the ears, which had been swollen, red, excoriated, and discharging, were much better. A gelatine bath was ordered, *o. n.* By October 14th, she was able to leave the hospital. It is worth mentioning that an ointment composed of Zinci Oxycli, Plumbi. Carb., and Hydrarg. Nitrico-oxydi, the latter in small proportion, caused great irritation and aggravation of the disorder, but agreed well when the red precipitate was omitted.

There can be no question that the chief curative agent, on both occasions, in the above instance, was arsenic. Yet I do not think that it was so effective in the second as in the first attack. The skin, it is true, got well covered with epidermis, and fairly sound, but it showed, even to near the last of her stay, a notable tendency to get red and and flushed. I am much disposed to connect this with the improved condition of her bodily health on the last occasion. She was then much less worn and emaciated, her vessels were better filled with blood, her heart's action stronger, and her general nutrition in a better condition. Her cutaneous nerves and arteries, however, were defective in tonicity, and easily allowed the tissue to become hyperæmic. In such conditions it is often very difficult to limit the action of the remedy to the parts which we wish to affect. The weak nerves and vessels need a tonic, and perhaps a powerful one, but the cells and fibres among which they pass are too irritable to tolerate it, and by their disordered nutrition aggravate the very hyperæmia which might have been quelled could the action of the remedies have been directed as we wished. That arsenic does act on the proper tissue of certain localities, as the mucous membranes of the stomach and large intestine, cannot be doubted by any one who has witnessed its toxic effects. I once poisoned a dog by inserting some arsenic into a wound at the back of his neck. On dissection the splenic region of the stomach was found intensely inflamed, the pyloric but slightly, the large intestine very much, but the small was nearly exempt. In the stomach, it was very remarkable how much more intense the inflammation was at the upper parts and free margins of the rugæ than at the lower. The exemption of some parts, and the severe affection of others, seems to me necessarily to imply a special action of the poison on the tissue of those parts, distinct from its general influence on vessels and nerves. On these grounds I think it reasonable to believe that arsenic may exert an injurious influence on the tissue of the skin, which may nullify its otherwise beneficial action on the vessels and nerves. Some such view as this is absolutely required to explain the fact that a healthy conjunctiva may be inflamed, and an inflamed one cured (in certain conditions) by the use of this drug in non-homœopathic doses.

H. C., female, æt. 50, married, but has had no children, admitted January 25, 1867. This woman was not placed under my care till March 3. During most of the previous time, viz., twenty-four days, she had been treated with moderate doses of Liq. pot. arsenitis; for twelve days she had Potass. iod. gr. iv. + Dec. cinch. ʒi. t.d., and sulphuret of potassium baths. She was stone deaf, so that it was no easy matter to communicate with her. Four years ago she suffered with the same disorder as at present; was then in the Middlesex Hospital. Her left leg was then affected, and so it was this time on admission, but the disorder has since then extended to the right. All last summer she suffered with severe "flushings" over chest and arms, and rigors. Feels very weak; always does even when well; is very subject to hysterical fits. She seems to have been ill, as she is at present, several months (many she says). Complains now of cold shivers at times, and of smarting, shooting, tingling, and burning sensations in the affected parts, and indeed all over her, which have allowed her no rest night nor day for five weeks. The skin of both thighs, and of the legs, and of the lower part of the abdomen, is of a bright deep red, quite excoriated, and discharges copiously, so that the bandages get stiffened. Her appetite is very bad; her stomach turns against food. Her chest is sometimes affected, and she complains of a good deal of cough. Ungt. Zinci. ʒi. + Plumbi. sub-carb. ʒi. ft. ungt. part. affect. illinend. Mist. potass. citratis. effervesct. ℥iss. + Magnes. sulph. gr. xx. *ter die*. Extr. Cannab. ind. gr. ½ + morph. muriat. gr. one-fifth, ft. pil. tus. urgente ssd.

16th. Is improving very much; her thighs are pale and nearly natural, only the skin is scurfy; the left leg is tender and sore about the middle of the front of the tibia,

and the skin is red, and denuded of epidermis, and encrusted with discharge. A small proportion of red precipitate has been added to the ointment, gr. 20 ad ℥iij.

23rd. Is worse last two days; has got a considerable eruption, of papular character, all over both thighs, attended with much sense of heat, pricking, and shooting. Bowels a good deal confined; tongue clean; pulse 108, of good force. Has had O. diet and porter hitherto; omit porter. Pil. hydr. gr. v. *h. n.*; pt. c. mist. c. magnes. sulph. ℥i. ad. ℥iss.

25th. Was very poorly last night, with pains and hot flushes about her; the pains shoot with shuddering all over her; her arms are so painful at times that she can hardly move them. Bowels well open; appetite bad. The papules have changed into minute vesicles, which, however, are drying up without discharging. Quin. disulph. gr. i. + magnes. sulphat. ℥ss. + acidi. s. dil. ♏ x. + spl. æth. chlor. ♏ x. + aq. ℥i. *quater die.* Lotio glycerinii.

April 3rd. The two thighs are now perfectly natural, the excoriated part of the left leg, over the crest of the tibia, is healed, and she feels no pain in it, though the epidermis is still thin, and the skin somewhat congested. There are some groups of discrete red spots (true small petechiæ) on the upper and back part of right leg, and some larger ones, more scattered, about the lower and back part of left. Takes food well; has no pain at all. Going out to-morrow.

The appearance of the diseased skin in these two instances was closely similar, it might be said identical. No dermatologist would have hesitated to pronounce them both examples of the same disease and in the same stage. The hyperæmia was somewhat greater in H. C. than in M. A. W., but it was only a difference in degree, and both, I repeat, were typical examples of acute eczema. But were they indeed truly the same disease? I presume that a chemist who had two perfectly clear colourless solutions before him, whose composition was unknown to him, would not consider them identical if they reacted differently with the same test. Some of the ingredients might be the same, but there must be some material difference between the two fluids. So it is, I believe, with cases of eczema like those I have detailed to you, they are apparently similar, but not really and completely so; and, unfortunately, not so in that which is of far most importance—viz., their therapeutic requirements. What was it that made the difference? Shall we assume with the humoralists—first, that eczema depends upon some "materies morbi" in the blood, and then that this "materies" differs in different cases? This view I believe to be fundamentally erroneous, chiefly for the reason that eczema is often cured by a tonic non-evacuant remedy as arsenic without any impairment of, but on the contrary, with great improvement in the general health. A more probable opinion I hold to be that the vital action, or susceptibilities of the human body are different in different individuals, as we know is certainly the case, and that consequently we get great variations not only in the quality of pathological processes, but in the way in which these processes, when established, are affected by remedies. That in our second case the disease was materially increased by the administration of arsenic there can be no doubt, and I am anxious that you should always bear in mind the possibility of this occurrence, and not look on this remedy as one which is in the least a specific for skin diseases. It is, I believe, nothing of the sort, its *modus operandi* is tolerably intelligible, and like all our good remedies, or almost all, it is capable of doing harm as well as good. When I give nitric acid, or tr. ferri muriatis, or quinine in an asthenic bronchitis, I have the same fear before my eyes that I have when I give arsenic for the cure of a cutaneous eruption. I fear lest they should chance to act as irritants and not as tonics, or as I have previously put it, that they disturb the nutrition of the tissue instead of toning the vessels and nerves.

This subject of the varying and uncertain quality of diseased conditions whose outward show is almost, or quite identical, seems to me of so much consequence, and to be so often left out of account that I must try to illustrate it a little more. At p. 82 of Mr. Green's "Compendium of Disease of the Skin" you will find the detailed history of a case of severe eczema of the hands occurring in the person of a lady æt. 40, of a sanguine bilious temperament. She was very desirous of trying the sulphur fume bath, which is suitable in nearly the same conditions that arsenic is, but it was not deemed judicious to commence it until she had been bled to ten ounces, had twelve leeches applied to each hand, and been well purged. Even with these preparations the fume bath increased the irritation and had to be discontinued, and it was not until she had been bled several times from the arm to sixteen ounces; had more leeches to the hands, and repeated purgation, that the fumigations were well borne and acted beneficially; she was cured in about three months. Here it seems evident that the depletion had no immediately curative effect upon the local disease, but, nevertheless, it was essential, as it modified the vital condition of the affected tissue, and rendered it tolerant of, and amenable to, an application which previously was only injurious. Some five years ago I observed a case of severe and extensive eczema in our wards, which was treated with arsenic and the sulphur vapour bath, and an occasional v. s. to six or eight ounces. This patient had been bled three times, and always with benefit. He was not under my care, but very shortly after his daughter was with very much the same disorder; she was, however, a person of weaker frame, liable to semi-syncopic attacks, and probably not so well fed as her father, who had full diet in the hospital. I treated her with arsenic and bark without any depletion, and her recovery was almost complete when I last saw her. Is it not reasonable to regard the disorder in these two instances as of different quality, so different that the treatment could not but vary correspondingly? Let me place also before you two instances on a smaller scale, where the action of a simple remedy produced very different effects. The first is the case of woman æt. 43, who, at the time of her admission for acute rheumatism, had on the inner and outer side of the left foot and ankle a large patch of erysipelatoid inflammation. The part was wrapped up in a poultice, and in twenty-four hours the hyperæmia had quite disappeared. The acute rheumatism was treated with pot. iod., pot. bicarb, and dec. cinchon, and presented nothing else unusual in its course. In the second case, a female æt. 25, suffering with rheumatism fever and pericarditis, and pleural effusion, had poultices applied to the precordial region and left back. Shortly afterwards a copious dull red spotty eruption came out on the skin so treated and extended to the axilla and neck. It was evidently of eczematoid character, and exhibited speedily some vesicles full of sero-purulent fluid. There can be no question that the poultice, that is moist warmth continuously applied, produced very opposite effects in these two instances—in the one removing hyperæmia; in the other producing not only it, but the further result of inflammatory effusion. Must not the vital condition of the skin have been materially different in these two persons, and supposing them to have been attacked with eczema as the primary disorder, is it not most probable that it would be necessary to adopt different treatment?

In conclusion, take the following as a fair inference from the foregoing experience. Do not suppose that diseases are uniform entities ticketed (so to speak) in books with their appropriate remedies, and that all you have do is to find out the name in order to have the treatment. This may do for counter practice, and sundry and various "pathies," but not for rational medicine.

OSMOTIC PROCESS FOR SEPARATING SUGAR.—In France, sugar has been lately separated from beet molasses by applying the osmose principle. The membrane used is paper-parchment. Water is passed upwards and molasses downwards on the opposite side of the membrane.

CLINICAL LECTURES

DELIVERED IN

STEEVENS' HOSPITAL,

TOGETHER WITH

OBSERVATIONS ON PRACTICAL MEDICINE.

By Sir HENRY MARSH, M.D., Bart.,
PHYSICIAN IN ORDINARY TO THE QUEEN IN IRELAND.

Edited by J. STANNUS HUGHES, M.D., F.R.C.S.I.,
PROFESSOR OF SURGERY IN THE ROYAL COLLEGE OF SURGEONS IN IRELAND,
SURGEON TO THE LORD LIEUTENANT'S HOUSEHOLD.

REFLECTIONS ON THE CAUSES OF DROPSY.

(Continued from p. 481.)

Now, the essential characterestic of all fevers, whether idiopathic or symptomatic, is a wasting and softening of the tissues. Febrile movements in the system present themselves under an infinite variety of forms, yet there is one point at which they all meet, viz., a wasting and softening of the tissues, whether it be the short-lived paroxysm of intermittent fever, or the persistent hectic fever, or the irritative or continued or remittent fever, or any of the intervening varieties,—it is a fact, that so long as the febrile movement is in operation, there is and must be a wasting and softening of the tissues, rapid in some cases, exceedingly gradual and slow in other cases, hence the condition is produced which may issue in atonic dropsy.

It should be kept in mind also, that so long as fever is operative upon the system, the digestive function is enfeebled,—the nutriment received into the stomach lowered in quantity as well as in quality, often to an extreme degree; frequently the food is liquid, watery, and almost purely farinaceous. From this cause, as well as from morbid action, the function of sanguification is altered, and the blood degenerated, and rendered less capable of stimulating the vascular system to the healthy discharge of its duties. This is percisely the condition of the liquids and solids which predisposes to dropsical effusions of the atonic character ; or, in few words, the blood is degenerated, the tonicity and contractile force of the vascular tissue depressed, and hence, spontaneously (or, as happened in the case above narrated, after slight and premature exertion whilst in a state of extreme debility), congestion takes place, and a thin serosity is extravasated. So long as the cause remains, this persists and increases ; the cause removed, it is wonderful with what celerity the absorbents—those ever-busy little creatures, always ready to undertake any new and extraneous office, ever prepared for all emergencies, sometimes for more than is required of them—set themselves to work, and cause to be carried off, through some one or other of the emunctories, the superabundant fluid : the thinner the fluid, the more readily is their task performed. In the case narrated, when the tone of the system was elevated, it was not a little remarkable how very rapidly the extravasated fluid was absorbed. I have seen such an amount of fluid within a few hours absorbed and carried off through the kidneys as would exceed credibility.

As a proof of the share which impaired tonicity has in predisposing to hydropic effusions, I may mention the case of a patient admitted some years ago into Steevens' Hospital. He had been not long before discharged as convalescent from a fever hospital. His appearance was that of extreme wretchedness and destitution ; he was paralyzed on the right side ; the whole of the right side was one pellucid mass of dropsical effusion, pitting on the slightest touch. Along the left side there was not a trace of effusion, not even at the ankle or instep. When undressed, he presented as strange an appearance as ever met my eye.

I saw this day a gentleman, aged 65, whom I had seen several times within the last three months. When I first saw him both limbs were œdematous. There was effusion also into the infra-cutaneous serous membrane of the penis, scrotum, and abdomen,—the cause, obstructive disease of the heart. The right limb was swollen far more than the left, even at one time to double its size. He had, for years antecedently, chronic disease of the hip-joint, which issued in shortening and wasting of the limb. The heart's action has been rendered more tranquil ; the effusion has been absorbed ; a slight œdema at the ankle and instep of the wasted limb still remains.

I have seen cases of inveterate disease of the sciatic nerve in which atrophy of the affected limb was followed by œdema. Thus it happens that atonicity of the vascular tissue is one of the predisposing causes of atonic dropsy.*

The atonic dropsy, of which we now speak, is most apt to arise in those forms of wasting disease which involve—in impaired function—the digestive apparatus. For example, there may be, and often is, chronic and ultimately fatal disease of the brain with paralysis, and all the while the patient eats largely and fattens. Many other instances might be adduced of both acute and chronic disease, not in the least involving the conditions necessary to the production of atonic dropsy.

The following case exhibits, distinctly featured, the variety of dropsy now under consideration. It is the only example of the disease described by me some years ago in this Journal, under the title of "Regurgitation without Nausea," that I have met with, of which dropsical effusion was a symptom.

An unmarried woman, twenty-three years of age, rather tall, with a light olive tint of skin, and dark hair, was three years ago affected with small strumous abscesses upon the wrist of the left hand ; slow and tedious was the course they ran ; they suppurated and cicatrized, leaving the characteristic marks. Scarcely had they cicatrized when she began, without the slightest nausea or sickness, to regurgitate her food. A very large proportion (her friends intimated all) of the food received at each meal was, portion after portion, without the least feeling of distress, returned. The daily regurgitation of a large portion of every meal had, for upwards of two years, persisted. Animal food, till within the last few weeks, had been loathed. All the usual garden vegetables were instantly regurgitated. Potato and egg remained not a moment. Except cream in very small quantity, no oleaginous article of diet was retained in the stomach. Bread in various forms, biscuits, and pea and bean flour, well cooked, seemed to suit the stomach better than other substantial articles of food. Broths and jellies were particularly disliked. For weeks the patient was almost wholly sustained by asses' milk : this too was ultimately loathed. No matter what the food, the daily regurgitation went on, much more of some than of other dietetic substances being ejected.

This case was not an exception to the general rule observable in this disease, namely, that whilst the food is regurgitated, medicine is retained.

Gradually, almost imperceptibly, she became emaciated, until at length she was reduced to a state of attenuation, as low as I have ever in the final stage of phthisis witnessed. The pulse a thread ; the heart's sounds, emaciated as she was, barely audible ; muscular power prostrated ; mental energies reduced to nearly a state of apathy ; deficiency of animal heat ; chilliness and icy coldness of extremities. The bowels, except stimulated by aloes, never evacuated ; the catamenia entirely suppressed ; the renal excretion diminished in quantity, in quality normal. Such was the state of the patient when a slight œdema at the ankles was first perceived ; rapid was its upward extension till it reached the knees and hips ; greatly were the limbs swollen ; extravasation, undiscernible by the eye, was diffused over the trunk, and was detected by the sustained pressure of the stethoscope leaving a circular pitting or in-

* Sometimes the atrophy of a limb is caused principally by interruption to habitual muscular action. There are cases of paralysis in which the pulse of the paralyzed limb is weaker than at the sound side. Such are examples of lowered vascular force and contractility.

dentation. The transparency as well as softness of the œdema were not a little remarkable. Chalybeates were now given in very full doses, and did not fail to produce effects the most salutary. The advancing progress of exudation was arrested; nutriment was more abundantly received and digested; the œdema gradually abated, and after a time wholly disappeared. This patient was afterwards attacked with influenza, fever, and bronchitis. For several days she was compelled to remain in bed; she was again greatly emaciated and debilitated. When she recovered, so far as no longer to be obliged to remain in the recumbent position, the dropsy partially reappeared; again it yielded to the same tonic and ferruginous treatment. Her recovery had now so much progressed that my apprehensions as to the existence of obscure glandular disease, involving, perhaps, the thoracic duct, were proved to be groundless.

In this example of general anasarca there were present all the causes which predispose to white blood effusions of the greatest tenuity; prolonged derangement of the digestive functions, wasting of the tissues, degeneration, and, as happened in this instance, diminution of the quantity of the circulating fluids, and atony of the vascular system. This was rendered manifest by the persistent smallness and weakness of the pulse, and by the continued feeble action of the heart. The result was dropsical effusion, and that too, as I believe, without any visceral disorganization. This case was not one of chlorosis; it was destitute of the essential features of this affection—not many cases of true chlorosis terminate in atonic dropsy. I have, however, seen cases of chlorosis which, in defiance of all treatment, have terminated in dropsy and death. But, in general, few diseases more unfailingly submit to well-directed treatment than chlorosis.

Of the following case, the notes of which I have long preserved, elucidative of the form of dropsy now under deliberation, I shall give a brief and much condensed statement:—

A young and beautiful woman, in the middle rank of life, highly but self-educated, of great mental endowment, of admirable taste, and strong sensibility and attachment, was, unconsciously, the one by whose hand a poisonous dose was administered to her sole surviving parent, to whom she was attached with all the fervour and devotedness of a daughter's love. The phial contained an ounce and a half of laudanum: it was given in mistake for a senna draught. When presented to him by his daughter, he tasted it, and said he did not like it, and would not take it. He had not been in good health. It was with much entreaty he was ever prevailed upon to take the medicines prescribed. She urged him, in terms the most affectionate and persuasive, to take his draught. He replied, "Dearest, you know I never can refuse you anything," and swallowed it. Three hours passed away before she was aware of her terrible mistake. She was aroused to it by the perception of the state of stupor into which her father had fallen, when it flashed across her mind. She found the senna draught, which she intended to have given, untouched; she also found the word *poison* printed in large letters on the empty phial. The shock to her mind was terrific; she became like one insane. All possible means were employed to save the life of the poisoned man, but they were employed too late. He died profoundly comatose at the end of a few hours. From the moment of his last expiration a change came over her; she was lost to all knowledge or notice of persons and occurrences around; she lay like a statue, pale and motionless; food she never took, except when it was placed upon her tongue. The only sound which escaped her lips was a faint "yes" or "no." When asked what ailed her, she would place her hand upon her heart. Her extremities were cold; she sighed and shivered frequently, and dozed brokenly and protractedly. To her the world, and all things in it, were a blank. Tonics and stimulants were administered; air and scene were changed; kind and compassionate relations and friends tried, and tried in vain, to rouse and to console; she pined away, and nought but a breathing skeleton remained. She lingered on, with very little variety or alteration of symptom, for ten months. Before her dissolution she became œdematous. The swelling, soft and transparent, was first perceived in the lower extremities; it gradually progressed upwards; it became apparent on the backs of the hands, along the arms, and ultimately it was universal.

All the viscera, spinal, cerebral, thoracic, and abdominal, were patiently and minutely examined: no trace of organic change of structure could be detected. There was a copious effusion of thin, transparent serum into every cavity, into every serous tissue. The pericardium was separated from the heart by an abundant effusion; the large amount of the dropsical effusion contrasted strangely with the extreme attenuation. In this case, to repress the increasing dropsy, acupuncture had been several times practised, always with relieving effect; even with this deduction the viscera appeared, as it were, bathed in water.

This poor patient, beaten down in mind and body, breathed her last without a moan or a painful struggle. The mental shock had paralyzed the vital actions, an evidence that in real life events do occur which transcend even the highest flights of fiction.

An almost total suspension of nutrition, sanguification, and vascular energy, characterized this case. The result was universal dropsy, consisting in the thinnest serosity.

I shall transfer to these pages cases formally published in my essay on chlorosis—cases in which life appeared to have been saved by acupuncture. They are precisely the kind of cases to which acupuncture can most safely and most curatively be applied.

Acupuncture removed the tension or vascular congestion which impeded the function of the absorbents: after its relieving action there was a copious flow of urine, a rapid subsidence of the dropsy, just as happens in that variety of dropsy (hereafter to be described) which has been termed obstructive dropsy.

In obstructive cardiac disease, the dropsy often increases despite the most powerful diuretic and cathartic medicines: one small bleeding from the arm suffices to alter the whole condition of the vascular system. The congestive tension of the vessels is removed; immediately the absorbents work, and the diuresis becomes profuse. The bleeding is adopted not at all with the view of subduing inflammatory action, but solely with the intention of unloading the congestion of the vessels, and giving full scope to the action of the absorbents.

For this valuable practical rule I am indebted to my late friend, colleague, and relative, Dr. John Crampton, who has, by lectures, and publications, by useful suggestions in the treatment of disease, done very much to enhance the value and to enlarge the domain of clinical instruction and science in this metropolis. I shall have occasion again to revert to Dr. Crampton's published recommendation of bleeding in dropsy, and when and where it is applicable. The following cases are well calculated to illustrate the subject of the present investigation:—

"A married lady, aged 19, had been for several months labouring under gradually increasing chlorosis. Previously to her marriage she had looked pale and delicate, and had lost much of her accustomed health, strength, and spirits. Marriage, it had been expected, would have had a salutary effect: and for a short time, whilst travelling, her health appeared to improve. She again, however, became languid, depressed, and pallid, and at length universally anasarcous. In this state I first saw her. She was confined to bed; her debility so great that it was with difficulty she could be moved: and her whole person was enormously distended. Her face was œdematous, but less so then every other part of her body; a copious serous effusion had taken place universally into the cells of the subcutaneous serous tissue. Her pulse was incalculably rapid, and so feeble that it was with difficulty it could be felt at the wrist. The heart's impulses were languid in

the extreme, but unaccompanied by any abnormal sound. The respiration was permanently and greatly accelerated. The alvine excretions were liquid and of light yellow colour; she was so weak and helpless that she could not be placed on the bed-pan. The urine was light-coloured, not copious, of low specific gravity, but without a trace of albumen. A variety of treatment, both tonic and diuretic, had been in vain employed, and all hope of recovery abandoned; and yet there was no evidence of organic disease; the sole change which had taken place was in the blood itself. From the appearance of the skin, and from the slightness of the pressure necessary to displace the fluid, it was evident that the effusion was of the thinnest nature. Under these circumstances I thought this an unusually favourable case for acupuncturation. The operation was immediately performed; a great number of punctures were made, from which thin serum flowed copiously, and much care was taken to keep the patient dry and warm. Common salt was dissolved in water, to which the muriated tincture of iron was added; and of this as much was given, at regular intervals, as the stomach could easily endure; together with farinaceous nutriment and wine. On the next day the patient's condition was in every respect an improved one; the anasarca was diminished, the pulse more distinct and less frequent, the respiration less hurried, and the urine much increased in quantity. On the second day many additional punctures were made, and on the third day they were again repeated. After this day the greatly increased flow of urine, and the marked diminution of every urgent symptom, rendered it unnecessary to reiterate the operation. She gradually—I may truly say rapidly—recovered; her restoration was perfect; she became vigorous and even florid; she has borne several children; and many years have since elapsed, leaving her in the enjoyment of uninterrupted health.

(To be continued.)

DR. RICHARDSON'S LECTURE

ON THE

INFLUENCE OF EXTREME COLD ON THE NERVOUS FUNCTIONS.

Part II.—Practical.

On the 4th instant, Dr. Richardson delivered the second part of his Lecture on Cold, being the last of his series of Lectures on Experimental and Practical Medicine, prior to the recess, lasting until October. We have already furnished our readers with a full account of the first portion, and are so confident in the interest that it excites, that even in the present crowded state of our columns, we are glad to continue the subject. It is a matter of congratulation that at length Dr. Richardson should have found a sphere for his work so peculiarly adapted to his talents, and should have had the courage boldly to commence this series of demonstrations. From the increasingly influential character of the audiences, it is clear that the effort is appreciated, and we sincerely trust that after the recess the lectures may have a still greater success.

After a preliminary recapitulation of the main points demonstrated in the last lecture, and which we fully reported in our number for 15th May, Dr. Richardson repeated the experiment of freezing a frog. Next, as rather a coarse illustration of the fact that extreme cold may change the molecular condition of even inanimate substances, he directed the ether spray on the box containing the mainspring in his watch, thereby arresting its motion. He then went on to state his opinion that the phenomena observed on freezing the animal tissues, depend essentially on a change in the condition of the water of the body. By the cold the water is transferred from a liquid to a solid state. Nerve tissue contains eighty-five per cent. of water. Make this water solid, and we get all the phenomena of negation demonstrated—a sort of temporary death. These phenomena may be produced also by other means. Heat is capable of bringing about a similar state. Abstract the water, dessicate the tissue by any means, and the result is the same. In illustration of this, a solution of brain matter was placed on a piece of glass, and on the spray being played upon the opposite side of the glass, a visible change was brought about. This was owing to the solidification of the water, and the separation of the albumen. The same appearance was produced by dropping on the matter some absolute alcohol. This result was brought about by the great affinity of the alcohol for water, depriving the brain matter of this substance. Heat was next applied by means of a spirit lamp. This agency brings into play similar sets of phenomena.

These three experiments were all shown by the lecturer, who remarked that thus, by congelation on the one side, and coagulation on the other, we get exactly the same phenomena, and then went on to refer to some things which are more subtle in their action than these. But these more subtle agents are no less definite in their effects.

Take, for instance, shock, which suddenly produces the phenomena of negation, seen in freezing the nervous centres. Again, a blood change is equally subtle in its operation, and the same may be said of pressure on the brain, which exerts a very definite influence. The lecturer conjectured that probably the effects of certain sounds and odours on the brain, might be explained in a similar manner, and so of certain sights which are known to produce the same phenomena. Moreover, loss of blood leads to the same change—the abstraction of the watery part of the nerve tissue. This leads to a conjecture that some of the phenomena of the collapse stage of cholera may depend on the abstraction of water, and the crystallization of the nerve matter in the body.

One of the most striking things in all these experiments on animals is the local independency of the several portions of the nervous system. Every part seems to have its own centre, so we can isolate many parts of the cerebrum. We may act on one hemisphere or both, or on the cerebellum, or on the medulla, or spinal cord. But we do not thereby necessarily interfere with the functions of the other parts of the nervous system. This fact explains many things in connection with, or in elucidation of, brain disease. There is, nevertheless, to be noticed a kind of balance of one part by another. In reference to this, it is clear that one hemisphere balances another. The corpora striata balance, and are balanced by, the cerebellum. The medulla is thus in the same relation with some obscure point not yet fully made out. One part of the medulla balances a part of the spinal cord connected with respiration. The medulla presides over the muscles used in inspiration; the part of the cord balanced by it presides over those of expiration. If we freeze the medulla we stop the breathing, but we stop it by arresting the inspiration. In the opposite case, that of freezing the segment of the cord balanced by the medulla, we stop the breathing by arresting the expiratory act. Thus, in the nervous functions there is a balance of opposite powers, just as in the muscular system there is a balance of flexors and extensors. This is of considerable import in a pathological point of view. In diseases in which there is a tendency to fall forwards for instance, this propensity may indicate disease of the corpora striata; but it is to be remembered that the disease may be negative while the symptoms only show overaction of the balancing part. The disease may be the result of negation of the function of the corpora striata, while the phenomena of the disease, the symptoms, are those of excessive or unregulated action of the cerebellum. Psychologically, these experiments are also interesting. This is, perhaps, illustrated in the act of going to sleep in the upright position. Sleep seems to begin in the visual organs. As the anterior part of the brain first loses its power, we see the tendency to nod—to fall forwards—caused by that part becoming inactive, while the posterior parts retain their function of propelling. The same may perhaps be said of the shock which sometimes results from looking down

great heights. This shock paralyses the anterior or thinking part, and the cerebellum retains its power, and so gives an impulse forward. This question might be put to the test by sportsmen. A bird shot flying will fall at once, rolling over and over *forwards*, while another turns over many times backwards, in its descent. Dr. Richardson believes that in one case the bird will invariably be found shot through the cerebrum, and in the other through the cerebellum, and he suggested that this fact should be noticed by such of his hearers as had the opportunity of joining in the sports of the field.

In diseases, exactly the same reasoning applied. An instance of suicide by hanging was mentioned. The man, however, had on, at the time of his attempt, a soldier's stock, which, by its compression on the jugulars, caused extreme pressure on the brain, the ventricles after death being found full of effused liquid. He was cut down alive, and immediately ran forwards several yards to a wall; afterwards he had the same symptoms. A man at Newcastle-under-Lyne lost a portion of the bone of the skull, and on pressure on the brain, it was noticed that he pitched *forwards*. It was also observed that in certain states of the weather a similar tendency was evinced, probably when the atmospheric pressure was increased.

In therapeutics, the experiments may be of great value. First of all, they may indicate the mode of action of alcohol. This fluid abstracts water from all the tissues, and most of all from the brain. But there is along with this a liberation of heat, and then a loss of heat, as the alcohol passes away with the water it has abstracted. Thus we have direct loss of water from the brain-tissue, and loss of heat from the whole body.

By a subtler action, ether and chloroform modify the relations of water and albumen. It was thought, years ago, that chloroform suspended oxidation. The idea arose with Snow, but it was not clearly shown to be fact. Some have thought that the chloroform was absorbed and picked up caloric in the system, and by expansion in the closed cavity of the skull, caused pressure on the brain. This idea was suggested by finding that if the skull be opened while an animal is under the influence of the drug, the brain does protrude. But it appears that some more direct change takes place. Dr. Richardson had placed animals in a rarified atmosphere, and found the effects of chloroform precisely the same.

The effect of nitrite of amyle, more subtle and more remarkable still, was next adduced in support of this view. Then was adduced amylic alcohol. This suspends all nerve function, but the animal, though apparently dead, will afterwards recover. A guinea-pig, to which this substance had been given, was then passed round, and appeared quite lifeless. The lecturer stated that it would recover the next day. On recovery from this poison, symptoms like strychnine poisoning are observed. It is a spinal poison.

Antiphlogistics.—The mode in which these may act was next referred to. The familiar experiment of the loss of heat on a solution of salt in water, was shown by the thermometer. Then a frog was injected with a solution of chloride of ammonium. This operation produced artificial cataract. The same effect was next produced on another frog by freezing the eye-ball with the ether spray. In each case recovery took place.

The question was now propounded, can cold be applied for the cure of inflammatory symptoms? The spray has been used to subdue acute mania. Cold below zero, for half an hour at a time, to the anterior part of the skull, has been found quite safe. It has been followed by quiet sleep, and by no extreme reaction. In chorea the same agent has been used.

In recovery from rheumatic affections, in which there is excessive vascularity of the membranes of the cord, it has been used in France, and Dr. Richardson looked upon it as likely to cure.

In ganglion, formed on a nerve, it has been successfully employed to stop pain and motion. This led Dr. Richardson to try it in tetanic action. To show how far he had pursued this, he injected a frog with 1-45th part of a grain of strychnine, and placed it under a bell glass on the table. For two or three minutes it tried to escape, and seemed lively enough. Then tetanic rigidity came on. When the effect of the poison had become so fully developed that the least touch caused violent convulsions, the cerebrum-spinal cord were frozen by the ether spray, and the effect of the strychnine was completely subdued. A frog does not eliminate rapidly, but possibly an animal with more effective secreting power might be kept frozen until the poison has passed away.

Could we then in tetanus keep a patient frozen until the tetanic poison could all be eliminated? If indeed that disease depend on a poison at all, and may not rather consist in some molecular change, such as may be caused by a shock or a blow:—if we had the hope, there is a great practical difficulty. Over the spinal cord there is so thick a layer of non-conducting tissue that no effect can be produced. In experiments with a delicate thermometer inserted in a portion of the spine, the spray being directed on the outside of the muscles, Dr. Richardson has not been able to make a difference of one degree. Though he would not assert that in the living body, some effect might not be *indirectly* produced through the skin, or its vascular and nervous system.

Original Communications.

EPILEPSY:

CASE OF SYPHILITIC ORIGIN: SOME PATHOLOGICAL AND THERAPEUTIC REMARKS: BROMIDE OF POTASSIUM, AND BICHLORIDE OF MERCURY.

By P. C. LITTLE, F.R.C.S.I., Etc.

The subject of epilepsy possesses, unfortunately, an abiding interest, whether we view it as regards the patient, his home circle, or our Profession. This treacherous malady, too often, alas! prematurely terminates the life of its victim by fire, water, or a sudden extinction of all nervous influence, notwithstanding, perhaps, years of anxiety, watchfulness, and tender care on the part of his friends. In cases of this kind, it is the aim of the healing art, not merely to alleviate human suffering, but to try to discover and remove, if possible, the causes of it. To ascertain these in many instances is impossible, as they are not always intelligible to the senses, nor to reason. This admission in nowise detracts from the inestimable labours of Sir Charles Bell, Marshall Hall, Claud Bernard, Flourens, Brown-Séquard, and others, who have recently enriched our knowledge of diseases of this nature, and have thus laid the foundation of a more rational and effectual line of treatment. With the hope of contributing somewhat towards the same end, I beg to place before your readers the following case of syphilitic origin lately under my care:—

Jan. 23rd, I visited J. T., aged 23, a muscular, short-set gentleman, of good constitution, regular habits, sedentary occupation, quiet disposition, clear and refined mind, who, on yesterday, after breakfast, fell in a fit in the street. I was informed that during the paroxysm, which lasted for about a quarter of an hour, he was insensible; the muscles of his face and upper extremities were violently convulsed; his features were livid and swollen; mouth foaming. On recovering consciousness, he had no recollection of what had happened, and only complained of great weariness, headache, and confusion of mind. A similar attack (the first he had ever had), occurred about six weeks ago, during the night, and was noticed by his brother, who slept in the same apartment with him.

As far as I could learn, the patient was free from any hereditary disease. About four years ago, however, he placed himself under my care, for a large suppurating bubo

in the right groin, and an indolent syphilitic ulcer on the glans penis. Under a gentle mercurial course, he soon regained health and strength, which he possessed until last year, when his hair began to fall out, and he became generally debilitated. For about four months previous to the first fit, he felt very weak and low spirited; suffered "fearful pain in the head," and vertigo, which have been more or less persistent.

He appears to have lost much flesh; is uneasy and anxious in manner; has deep congestion, and frequent flushing of the face and neck; evident pulsation of the carotid and temporal arteries; countenance listless and stupid; eyes—staring and pearly, conjunctivæ injected, pupils slightly dilated, but indifferent to alternations of light; skin cool and perspiring; pulse 88, small, soft, and nervous; tongue brown in the centre; appetite insatiable; bowels pretty regular.

He complains particularly, of an uncomfortable feeling of restlessness day and night; throbbing headache; slight cough; occasional tinnitus aurum; loss of memory,—forgetting that he has taken his full meal, he sits down to eat another; tenesmus, and bloody stools.

On examining him, I observed some specks of a papillar eruption upon the forehead. I could discover no tumors about the nervous centres, or peripheries; no nodes. Pressure upon the epigastrium, and along the colon, but especially over its sigmoid flexure, produced much pain. The abdomen was tympanitic, and unusually sensitive. The roof and posterior wall of the pharynx were intensely red, and studded over with deep, roundish, unhealthy-looking ulcers, their edges sharp, and fringed with grey shreds of the broken down tissues. This condition was, I conceived, the exciting cause of the patient's misery, and to remedy it, I directed my treatment.

I began by sponging the ulcers and the pharynx generally with a strong solution of nit. arg. (℥j. ad ℥j.), a course which I repeated every third day; ordered a mustard foot-bath, and brisk mercurial purgative, at bed time; rest of mind and body; no strong drink; slop diet; chicken broth, and milk plentifully.

Next morning he said that he felt something better; he slept pretty well; the bowels had been slightly moved, with much distress and loss of blood.

I prescribed, to be taken three times a day, ten grains of bromide of potassium, with a drachm of fluid extract of sarsaparilla in water; a blister to the back of the head and nape of the neck; the mustard foot-bath every night; the bowels to be regulated by the occasional use of rhubarb and blue pill, at bed time, and a saline aperient the following morning.

At the end of a week the nervous symptoms were mitigated, although the ulcers in the pharynx were much the same; the abdominal tenderness more distressing, and blood still passed at stool. I continued the cauterisation of the throat; advised sinapisms to the stomach and bowels, a flannel binder at other times; the occipital blister to be kept open; and *twenty* grains of the bromide of potassium, three times a day, with the sarsaparilla. Having persevered with this treatment for more than a week, and finding no very marked improvement, I decided upon placing my patient upon a short alterative course of mercury, one-twelfth of a grain of which I administered in an ounce of the sarsaparilla three times a day. In less than a week the gums became spongy; the throat perfectly well; and, in another week every uncomfortable symptom disappeared. For about a month afterwards, I continued the mineral, watching carefully its effects. The patient has enjoyed excellent health ever since.

This case is interesting in many respects. It exemplifies an appalling disease, which is still obscure in its pathology, distinguishable by no regular symptoms, and frequently defiant of all treatment. Pathologists have failed to discover any constant morbid conditions associated with epilepsy; and, in many cases, no alterations whatever are noticeable, which seems incompatible with the present general opinion, that the disease originates from abnormal changes at nervous centres. The most valuable recent addition to our pathological knowledge of epilepsy, seems to have been made by Van der Kolk, who, by pursuing the inquiries of Georget, Prochaska, Hall, Todd, and like observers, has arrived at the conclusion, that "the starting point of the various convulsive movements in epilepsy, must be sought in the medulla oblongata," which post-mortem investigations have shown to be the more generally affected centre of the cerebro-spinal axis.

The admirable experiments of Brown-Séquard have tended to confirm this opinion, and to reveal more clearly the features of this disease, which is characterised by increased reflex motor sensibility, with more or less of loss of consciousness, and of control of reflex action. Dr. Todd gives loss of consciousness as pathognomonic of the disease; but, as that condition is common to many other affections, it cannot be considered as distinctive of this. Besides, in a fit, sensibility may not be entirely suspended, though all other epileptic phenomena exist. Such a case, I have at present under my observation. Diminution of consciousness seems, therefore, to be a symptom, the degree of which is measured by the contraction of the cerebral capillaries. In other words, the medulla oblongata is the centre of reflex movement, the impulse from which is communicated, on the one side to the hemispheres of the brain, inducing impairment of the mental faculties, and on the other to the muscles of the extremities, giving rise to convulsions. The character of the convulsive phenomena has been generally commented upon, and well deserves attention. Dr. Russell Reynolds makes two stages of a fit, the first that of "tonic spasm;" the second, of "clonic," or that called by Dr. Sieveking "the automatic movement." Perhaps Dr. Watson's description of a paroxysm is the most suggestive. He says that, "in most of the fits in which I have happened to see the commencement, the first effect of the spasm has been a twisting of the neck, the chin being raised, and brought round by a succession of jerks to one shoulder."

It has been remarked by Römberg (and I have also observed) that, during a fit, although sensation is suspended, reflex action may be excited by suitable stimuli, such as a dash of cold water in the face, which Dr. Reynolds ably explains by, holding that, "the receptivity of the peripheral expansion of the nerves is not seriously interfered with." Experience has shown that frequent repetitions of those fearful attacks generally end in a permanent impairment, sometimes total loss of the mental faculties, with paralysis more or less complete—the consequences of altered nutrition of cerebro-spinal centres. This constitutes the most deplorable aspect of the disease.

The history and peculiarities of this case facilitated the diagnosis and treatment. Here was epilepsy in a system tainted with syphilitic poison, manifesting itself by chancre and bubo, falling off of the hair, papillar eruption, hæmorrhagic, or ulcerated condition of the bowels, and ulcers in close proximity to the base of the brain—a region intimately connected with the medulla oblongata, the great source of reflex action. The syphilitic origin of the fits, their infrequency, and in particular, the tractable character of the ulcers, were elements of a favourable prognosis. The circumstances of the case indicated the local treatment. The constitutional management was not so evident. From all that has been recently said in favour of bromide of potassium in epilepsy, I determined upon giving it a trial, and from my observations of its effects in this, and in other cases, I can testify to its beneficial effects, which M. Voisin, in the *Bulletin de Therapeutique* of April, thus sums up:—"It is hyposthenic, calming, hypnotic, and slightly alterative; it is of real utility in epilepsy. It does not usually cure absolutely, but it diminishes the disorder in a marked degree; it lessens and even suppresses the nervous erethism of epileptics—the shocks and convulsions which they so frequently endure." In the present case, sufficient time appears to have been given to this remedy, but without the desired relief to the patient. I am of opinion that this salt is not possessed of sufficient alterative properties for

the treatment of epilepsy of venereal origin. Hence, I was obliged to resort to an old and well-tried friend, whose character is unquestionable, and with the happy results I have stated.

The treatment of epilepsy, and of all kindred diseases, advocated by Dr. Chapman, of London, upon the broad principle of regulation of temperature in the vicinity of the cerebro-spinal centres, is really scientific. What can be more reasonable than to try to restore to those centres their normal temperature, which is a condition necessary to their proper functional and organic existence. But is this principle applicable in all cases? It were well if we could say so. Dr. Chapman himself will not assert that epilepsy caused by eccentric irritation, as from worms, a thorn in the foot, or venereal ulcers in the throat, can be eradicated by the application of cold or heat along the cerebro-spinal axis. In epilepsy from spinal irritation, I have no doubt of the benefits of ice along the spine. Some years ago I was consulted by a young man in whom this fearful disease was traceable to spinal irritation, excited by ononism. I admonished him against his injurious habit, and ordered him cold shower baths down the spine, night and morning, which soon reduced the fits from one almost every hour to one or two in the day, and with diminished severity and duration. These good results only continued as long as the treatment was persevered in, and the exciting cause avoided.

Dr. Chapman's principle is surely a rational one for certain cases; but for others, such as the case under discussion, it is unsuitable. It might, perhaps, be more judicious, even at the risk of being considered non-progressists, to select our remedies according to the special circumstances of each case—a practice generally followed by our most distinguished professional brethren from the beginning, and which, in all probability, will continue to the end, unless a more correct and ample knowledge of the nature of this fearful disease, be discovered by the light of pathology and of kindred sciences.

CASE OF HYDATID DISEASE OF THE LIVER; SUPPURATION; RECOVERY.

By W. B. PEEBLES, M.B.

Mrs. ——, aged 37, previously healthy, after weaning a child towards the close of last year, began to complain of loss of appetite and energy. She had been subjected to a good deal of mental worry and annoyance.

Early in February last I saw her for an inflamed tonsil, which yielded to treatment without suppurating. A fortnight after she was seized with violent symptoms of inflammation of the liver. On the fourth day of the attack I was again asked to see her; she was supported in the upright position on a sofa, as being the easiest one. The countenance was sallow and expressive of great suffering; she coughed incessantly, and complained of intense pain on the top of the right shoulder in the right hypochondrium, epigastrium, and left hypochondrium, passing back to the spine on each side, and shooting upwards to the clavicles, the right especially.

On examination the liver was found to be evenly enlarged, and projecting two inches below the ribs. It was so painful as scarcely to bear a touch, chiefly at the epigastrium and right lobe. The spleen also was enlarged and painful; tongue soft, ash-coloured; pulse 80, weak; bowels loose; urine scanty and high coloured; catamenia present.

It is not necessary to record the details of her tedious and painful illness. From the first, support and opiates were indicated, repeated blisters were applied, and the abdomen kept covered with linseed poultices, as in several places, particularly in the iliac fossæ, the bowels became tender when touched, and had a knotty feel; they also became constipated. Rigors, followed by profuse perspiration each evening, soon set in. The catamenia did not appear at the proper periods, and she complained of a burning pain below the axilla; irritability of stomach; prostration; headache, and loss of sleep. The urinary secretion, which had varied, became copious. There was delirium occasionally. Large quantities of opium, internally and locally, having failed to induce sleep, the injection of morphia under the skin was found of great use.

The discharge from the bowels, which only took place after medicine or enemata, assumed the appearance of "wet slack" as she termed it. This, when diluted with water, stained paper a red colour, showing it to be altered blood.

She presently began to lose power in the right arm, and to suffer from hysterical symptoms, with palpitations, being impressed with the notion that she had cancer, and that something was pressing against the heart.

On the seventy-third day of her illness, owing to an increase of suffering and great throbbing at the epigastrium, she said to her husband she was sure something was about to happen. Almost immediately after something burst, and she felt fluid pouring into the bowel.

In two hours afterwards purulent matter was discharged per anum, containing a number of small white bodies, like marbles, which were unfortunately thrown out. Some of the black matter also came away, and there was a prolapse of about six inches of bowel, stated to be of a dark purple colour. Great relief was felt with general improvement. In about a week all the old symptoms returned with increased intensity. Rigors, perspirations, palpitations, delirium, and great pain, not at the epigastrium as before, but as high as the centre of the sternum at its right edge. Nothing would stay in the stomach; movement of the bowels—always painful—was followed by fainting. She described the sensation of "another gathering," which, after a fortnight's agony, was discharged into the stomach. A bowlful of offensive matter was vomited. There was immediate relief, but the bowels continued costive and tender everywhere. I feared to give aperient medicine, which was much needed, on account of the state of the parts, and trusted to soothing enemata, to wash away the black matter. From the great soreness when the bowels acted, and from pure blood coming away, it was to be feared that the mucous membrane was becoming abraded. In the discharge one day was found a "firm, white, fleshy substance, egg-shaped, the thickness of three fingers put together, with strings at its ends." I am unfortunately obliged to give the nurse's description of it, but it is not a bad one of a hydatid cyst. There cannot be much doubt that it was one, and that the marble-like bodies discharged previously were of the same nature. It was put aside for me, but a busy person threw it out.

Amendment progressed, the black evacuations after enemata, the constipation, and tender state of the bowels, however, showing that the portal engorgement had not yet subsided.

She is now (May 29) up every day, and doing well.

No cysts came from the second abscess. The tongue was always clean; nothing the colour of bile was to be seen anywhere. The portal system seemed to be completely blocked up. There was no albumen in the urine at any time; after the first week it was profuse, and of low specific gravity. The kidneys, although tender on pressure, escaped, as their veins do not go to the porta; but the spleen suffered.

I think this case worth recording, because—1. Abscess of the liver is not common here; 2. Hydatid disease is still rarer; 3. The symptoms at one time were very like those of cancer. But the malignant expression of countenance and uneven surface of the gland in that affection were wanting.

During the progress of the case, a considerable amount of stimulants was consumed, owing to the weaknesses; but, fearing least alcohol might be adding fuel to the fire, I made several attempts to do with a smaller quantity. This, however, seemed to be imprudent, and if, after rousing the system generally, it increased the pain in the liver, it also, probably, assisted in the adhesive inflammation which has lengthened the patient's life.

MEDICAL SOCIETY
OF THE
COLLEGE OF PHYSICIANS OF IRELAND.

The President, Professor STOKES, in the Chair.

(Continued from page 552.)

Dr. HAYDEN said—Mr. President, with your permission I would make a few observations on the important and interesting subject now under discussion. My experience of the disease which has recently appeared in Dublin, and to a limited extent in the provinces, extends only to the two cases which I have laid before the Society, but these cases were of a typical character, and made the subject of careful and anxious study; and to the disease, as observed and reported on in Dublin generally, I have given a good deal of thought. It appears to me that the most important preliminary points to be determined in relation to this novel disease are its general nosological affinities, and its pathology; and in considering it under these two heads we must duly estimate the two prominent groups of symptoms associated with it—namely, the cerebro-spinal and the cutaneous—in relation to the order of their manifestation, their mutual connection, and their relative significance. Only two views can be held of the pathology of the disease —namely, either that it is essentially a form of cerebro-spinal meningitis, a disease with which this country has been long familiar, but modified by the "epidemic constitution" of the time in which we live, and therefore associated with marked prostration, and a peculiar cutaneous eruption, and ecchymosis; or that it is primarily a disease of blood-deterioration, allied to the essential fevers, and implicating secondarily the cerebro-spinal axis. I confess, sir, that I am in favour of the former of these views, notwithstanding that some difficulties arise in the detailed application of it to the disease under consideration. It is noteworthy that in the great majority of cases reported, the attack commenced with symptoms of cerebro-spinal irritation—viz., pain in the head and back, sickness of stomach, morbid sensibility, and tingling sensations of the general cutaneous surface, followed in many instances by retraction of the head, recurvation of the spine, dilatation of the pupils, convulsions, and coma. These are undoubtedly the symptoms of cerebro-spinal meningitis, and, in a very large proportion of the cases reported, including both of those which have come under my own observation, they preceded the cutaneous manifestation by an appreciable interval, varying from a few hours to as many days. Of the two cases which came under my own notice, in one, headache, vomiting, and hyperæsthesia of surface preceded by four days, and contraction of the pupils and intolerance of light, by twenty-four hours, the appearance of eruption on the skin, and in the other, bilious vomiting, and other symptoms of cerebral disturbance occurred about nine hours before the petechial eruption appeared. So far, as to the order of manifestation of the two groups of symptoms. The pathogenesis, or pathological connection between meningeal inflammation and cutaneous eruption and ecchymosis, I will not pretend to explain. I may remark, however, that the recent discoveries of Bernard in regard to the influence of the vaso-motor nervous system upon the capillary circulation, on the one hand, and the intimate connection of that system with the spinal cord, on the other, would seem to warrant the assumption that central irritation of the cord may so modify the tension of the blood-vessels as to favour, if not give rise to, extravasation from the cutaneous capillaries; but this, be it remembered, I offer, not as a solution of a great pathological problem, but as suggestive of a line of argument which may be further profitably developed. Observation and analogy are more to the purpose here. The frequent occurrence of herpes, eczema, and psoriasis, in connection with chorea, is well-known. At the present time I have under my care in hospital a case of right hemiplegia with loss of speech, in which the patient has suffered from two successive crops of an ecthymatous eruption on the face and neck, of a most obstinate character commencing on the paralysed side, but subsequently extending to the other. In the great majority of cases in which the advantage of a post-mortem examination has been obtained, evidence of active meningeal inflammation at the base of the brain, and in the spinal canal, has been found; the arachnoid was opaque in many places; serum was effused into the cerebral ventricles, and deposits of lymph and pus were found at the base of the brain, and on the surface of the spinal cord. Now, sir, I would venture to assert, in presence of the many able pathologists assembled here, that such a marked preponderance of active inflammatory lesion of one particular organ, as has been found associated with this disease, is unknown in the pathology of essential fevers. It has been alleged, as favouring the view of the general nature of the disease, that pericarditis and pleuritis have been likewise met with in connection with it, but the proportion in which these complications have occurred (only three cases out of the whole number reported to the Society) is much too small to confer upon them more than an *accidental* value.

Dr. MOORE, Vice-President College of Physicians, said that he had an opportunity of seeing a series of cases with cerebro-spinal symptoms, in Sir P. Dun's Hospital, about eighteen months ago. He had listened attentively to the details of all the cases which had been brought before the Society, and in every instance where a post-mortem examination had been made, evidence of cerebral and cerebro-spinal meningitis had been found, and in two cases which he had the opportunity of seeing, through the kindness of Dr. Gordon, the disorganization might have been termed "excessive," the whole spinal cord being deluged in pus. The symptoms in so many cases could not be expected to be identical. In one there was violent pain along the spine; in an another, paralysis; in a third, vomiting and convulsons, all of which symptoms were admittedly nervous, and such cases are valuable, so far as their details go, in pointing to the same exciting cause; but it is upon the cases where the pathology was obtained that we must chiefly rely, more especially on those of Dr. Haverty, in every one of which evidence of severe nervous lesion was shown, and the same was observable in almost every case which has fallen under Dr. Gordon's notice. As regards the herpetic eruption, which prevails in these cases, Dr. Moore went on to say, that recent experiments have shown that nervous irritation is capable of producing herpetic or some such allied eruption over the periphery, and he had seen this proved in two remarkable instances, when large thoracic aneurisms had given rise to persistent nervous pressure, and to equally persistent herpetic eruptions. As regards the purplish spots, call them "petechiæ," "maculæ," or what you will, they must be regarded as hæmorrhagic, and having detailed the close intimacy which is now admitted to exist between the vaso-motor and cerebro-spinal symptoms—so close, that it is difficult to determine where the one stops and the other begins—he concluded that the hæmorrhage was most rationally accounted for by the sudden paralysis of the whole nervous system, more especially the vaso-motor, by which means the blood over the body generally may be said to have been "let loose." Everything considered, he thought physiology and pathology must lead us to view this disease as essentially of a cerebro-spinal character. Our knowledge of the nature of diseases in the abstract is as yet limited, but with the information we are possessed of, it is as rational to call this prevailing epidemic a "cerebro-spinal meningitis," as it is to define a disease "pleurisy," or "pneumonia," where pathology shows us a pleura coated with lymph, or the lower half of a lung in a state of trepatization.

Dr. T. MORE MADDEN said that he had been requested to say a few words in reference to the observations made by Dr. Smith, on the occurrence of the black death of the fourteenth century in Ireland. In the course of his remarks on a case of malignant purpuric fever, which he read before the Society, Dr. Quinlan had mentioned that he

had been informed that there was reason to doubt if the black death which prevailed in England in 1347 had then visited in Ireland. Dr. Smith, in reply, quoted an authority the name of which he (Dr. M. Madden) did not catch, but which he supposed, must have been Father Clin's Narrative, cited in Harris's "History of Dublin." Now, as he (Dr. More Madden) had mentioned to Dr. Quinlan that no allusion to black death in Ireland in the year 1347-'48 was to be found in the "Annals of Ireland," by the Four Masters, he thought it right to say that last year, when engaged on an essay which he then published on the connection existing between epidemic and epizootic diseases in Ireland in the middle ages—which connection, he might observe, was recently well illustrated by the rinderpest, which preceded and accompanied the epidemic cholera in England last year, he had frequent occasion to consult the "Annals" of the Four Masters, and was particularly struck by finding that these "Annals," which contain special notices of the plagues which visited Ireland, make no reference whatever to the "black death" at the time when it prevailed elsewhere. And, therefore, without having the least doubt of the accuracy of Father Clin's Narrative, he thought it might be of interest, when the history of the disease came under discussion, to mention this omission, as it was certainly curious that a pestilence, so remarkable in its character and so fatal in its results, should have occurred in Ireland in the year 1347 without being observed and chronicled in the cotemporary "Annals" of the Four Masters.

Dr. Banks said that having seen some cases of the disease under consideration, he should like to state his experience of it shortly. He had seen some cases in which cerebro-spinal symptoms were very well-marked, and in others those symptoms were absent. The disease appeared to him to be altogether a blood disease, and in the observations made by Dr. Gordon on the evening before last he entirely agreed. He had himself reported in the journal some cases of the disease, and there was just one point to which he wished especially to revert, namely, that from the period that this new disease first appeared, he had seen a considerable number of other diseases in which black spots appeared on the surface of the body. He saw lately in consultation with a physician on the other side of town a case of acute rheumatic fever, in which large purpuric spots appeared, in no respect differing from some of the cases of this terrible disease; so much so, that at the moment he first saw them his impression was that the disease was about to assume the character of this most fatal malady. He saw at least six cases within a short period in which these purple spots appeared. It seemed to show, as Dr. Hughes had suggested, that there was some peculiar state of the atmosphere owing to which this asthenic condition of disease was present. He believed the disease they were now considering was in almost all cases cerebro-spinal arachnitis, but there were some cases in which the altered condition of the blood, manifested by the appearance of the spots over the surface, occurred without any sign of cerebro-spinal meningitis being discernable after death. With reference to the name of this disease, he would venture almost to give it a name, but he hesitated because there were so many objections to all the names which had been suggested. He strongly protested against some of them, and more especially against the name "black death." It would be a waste of time to go further into that subject. They all knew the terror it had struck into the public mind when the name first appeared in the newspapers. They all knew that pestilential diseases were frequently fatal to the first persons attacked, but the effect of calling the disease "death" impressed people with the notion that all attacked must die. In almost all such diseases experience showed that the disease decreased in virulence as it wore out, and that the latter cases in every epidemic were not so bad as the earlier ones. He believed this disease was a blood disease, that the greater number of cases were cerebro-spinal arachnitis. He would venture to call it pestilential purpura. It had all the attributes of a pestilential disease, and he thought this name less objectionable than some of the names that had been given to it.

Mr. Fleming bore testimony to the great interest and importance of the remarks which had been made by the gentlemen who had taken part in the discussion. His observations would be limited to what fell within his special department in the surgical wards of an hospital. He thought, as regarded the nomenclature of the disease, they were all agreed that the fearful appellation "black death" should be given up; and he would suggest that the name which the President had given it would be suitable, as expressing all its essential features, viz.—malignant purpuric fever. The word fever, perhaps, was questionable, for they had heard that the disease had manifested itself without fever. As to its surgical aspect, he would ask those who had witnessed surgical operations and injuries, to recall the supervention of symptoms like these as regards their extreme intensity, and their fatal termination. They were all familiar with them, and especially as regards diseases affecting the periosteum, with eruptions on the skin, and complicated with pericardial effusion.

The President said he would now offer a few remarks on the debate of that night, and on the subject in general. He might observe, in the first place, that his friend Dr. Gordon, in his paper in the *Dublin Quarterly Journal*, had, to a great degree, exhausted the subject, so far as the epidemic of cerebro-spinal arachnitis is concerned. He did not say that he entirely agreed with Dr. Gordon in the general conclusion at which he had arrived as to the pathology of the disease, but, so far as the observation of the local disease went, he thought his paper was an exhaustive one. Now, it appeared that, during the past year at all events, Dublin had been visited by two forms of *essential disease*. The first of them was the affection which they had been discussing that night, and the second was the cholera; and, looking at the invasion of these diseases in the one year, it was very hard to avoid the conclusion that some relation existed between them. The disease which he proposed to call malignant purpuric fever (he was not, however, wedded to that name), seemed to precede the cholera. In some cases it was in its very highest form of development before the cholera broke out. That extraordinary case of Dr. Croly's apprentice, which, as far as he knew, was the first case of the disease, occurred in March, 1866. That young man went to bed feeling a little ill, after sitting in his room during Sunday. His master visited him in the evening, and observed a few petechial spots on the neck. This alarmed him, because so early an appearance of petechia in fever is unusual. He saw him in the morning and the spots were black; they appeared to grow under his very eye. At eleven o'clock the spots were numerous and extremely large, and between eleven and one o'clock the entire right arm and half of the right chest, were as black as the coat of any gentleman in the room; large patches of ecchymosis appeared all over the rest of the body, and the patient was dead at two o'clock. During the pressure of the cholera the disease seemed to be very much less frequent. It seemed to be to a great extent suspended. There were but two cases in the Meath Hospital in the months of October, November, and December, and they were not cases of the very rapid form of the disease. Then when cholera died away this extraordinary disease reappeared, and so far from being confined to Dublin, it appeared in several country districts, and they did not yet know in how many country districts the disease may have appeared. It struck him that this disease had all the characteristics of a most malignant blood-poisoning, and that, though it was in character an essential or so-called zymotic affection, it differed from every form of fever with which they were familiar. Every case had been contributed by independent observers, and the details of the cases presented complications singularly varied, yet there was an amount of generic coincidence among them to justify their classification under one head. How did the disease differ from ordinary maculated fever? It differed from fever in the rapidity with which it ran its course—a course from a few hours to a few

days. The first was a thing unknown in cases of ordinary typhus. It differed also in the eruption—in the character of the eruption, the mode of its appearance, and the duration of the eruption. This disease began in ordinary cases with the eruption, which typhus fever did not ; and it differed again in the frequency of one special local symptom—namely, the cerebro-spinal irritation. It might be a question whether these symptons were the result of reflex action or the result of general inflammation of the structures themselves. The fact was certain that in many cases the membranes of the brain, and at least those of the upper part of the spinal cord had been found inflamed. This was one of the rarest circumstances in typhus fever. Let them consider these points. First, the duration of the disease—the disease had been fatal in less than eight hours —as few as eighteen or twenty hours was not at all infrequent. From five to six days appeared by different cases which had been reported to have been an ordinary proportion, and there were three cases where the disease ran on for several weeks before the patient was convalescent. The eruptions had been very various. In some the spots were elevated. In rapidly fatal cases it had appeared in the form of petechiæ, running rapidly into ecchymosis, the original ailment not being preceded by fever at all. A few hours were sufficient to render a large portion of the body black. Another point of difference between this disease and typhus fever was an important one—the variation in the range of temperature. In one case in the Meath Hospital, the temperature on the third day was below the natural standard—96 7-10ths, and in this case the highest temperature reached was 98 8-10ths. The pulse was only 80. In the second fatal case on the second day, the temperature was 99 6-10ths, and on the third day it rose three degrees. The pulse, on the day preceding death, was 84. The occurrence of cerebro-spinal arachnitis in many of these cases was remarkable. In two cases which he saw, the patients could only lie on the abdomen, and when the trunk of the body was lifted up by main strength, the patient immediately slipped down to the bottom of the bed. There was great variety in these cases of cerebro-spinal arachnitis. One of the first cases of this disease which he saw was marked by some curious symptoms. A boy was taken ill with symptoms like those of cholera ; symptoms of collapse set in in four hours ; large spots came out on the arms ; the head became retracted, so that he could only lie on his belly. He had a low form of fever which left him on the third day, when the spots began to disappear, and the boy had a quiet pulse, but the retraction of the head continued to the most extreme degree, and in this state he remained for seven weeks lying on his belly, eating, drinking, sleeping, and getting fat. At the end of seven weeks the retraction got less and less, and he completely recovered. This was a remarkable fact, showing that they were not to infer from the existence of this special symptom, that there was necessarily cerebro-spinal arachnitis. Another boy had typhus fever, and in recovering from it the retraction of the head took place. He could only convey to them an idea of its extent by saying, that if the boy was raised up in bed, the face was almost horizontal. At this period of extreme retraction, a liniment of iodine was applied to the neck, and the next day the retraction was almost altogether gone. They must not forget that in some cases, neither the local symptoms of cerebro-spinal arachnitis were present, nor were any indications of them found after death. He saw one case where there were no symptoms of cerebro-spinal arachnitis. The patient preserved his senses up to the last. This would tend to show that this lesion was not primary but secondary, and all observation went to establish that it was a secondary and not an essential condition. Let it not be forgotten that in some of the worst cases the symptoms of spinal arachnitis were absent, and if as some supposed the ecchymosis and eruptions were due to disturbance of the nervous centres they should have found in the worst cases of the disease the greatest amount of lesion, but the fact was not so. It might be that there was an epidemic tendency to local disease. Some years since they had seen a great many cases of abscess of the liver, which was a rare disease. They knew from Dr. Darby, Dr. Law, and Dr. Gordon, that there had been cases of cerebro-spinal disease very frequent, for some years past. But although this disease of cerebro-spinal arachnitis had been naturalized amongst us for years, it was only during the last year that the disease marked by this singular eruption had occurred. Now, there had been an idea abroad of this disease being measles, from the similarity of the eruption in many cases, and it was worthy of remark, that during the time that these cases were most prevalent, measles had been unusually frequent, and unusually fatal. A case had occurred under his observation which showed the difference between this disease and measles. In a family in this town one of the children, a little boy, had well formed and natural measles. A little girl, his sister, sickened, and the parents thought she was getting measles. This was followed by the black eruption which was characteristic of the disease which they were now discussing. After a few days well-marked measles made their appearance, causing a peculiar change in the girl's aspect. All these facts would strongly bear out the view that this disease was a blood-poisoning, and that the cerebro-spinal affection was a secondary disease in this form of fever. Now as to the question of contagion they had had few facts before them until the last day of meeting to lead to the conclusion that this was a contagious disease. Dr. Haverty in his paper, mentioned some facts tending to that conclusion, and they had at present in the Meath Hospital a mother and child labouring under this disease, and who had apparently caught it by contagion. Another child died of this black disease some time ago. Some days afterwards the second child sickened with the same symptoms. The mother slept in the same bed with the child. She sickened the next day, and both mother and child were at present in hospital. These facts were very important with reference to the question of contagion. Although the disease had up to the present proceeded sporadically, there was no reason to say that it might not be of a contagious character. He thought this was a disease of the blood, of an essential nature, and that the secondary and incompetent cerebro-spinal arachnitis was to explain it. The number of cases contributed by members and visitors showed the great value of the Society. It showed that the Society was becoming a great medical observatory, affording men an opportunity of placing upon record cases of a remarkable character, while the facts were fresh in their memory (applause).

The meeting then separated.

POOR-LAW INTELLIGENCE.

LONGFORD UNION.

The usual weekly meeting of the Board of Guardians took place at the Workhouse on Wednesday last—The Right Hon. the Earl of Granard, K.P., in the chair.

The clerk read the minutes of the proceedings on the last day of meeting, and they were signed.

Dr. Nicolls, in his report, called the attention of the Board to a statment set forward in the newspapers as follows :—

To the Chairman and Guardians of the Longford Union.

My Lords and Gentlemen,—I beg to direct your attention to a letter recently published in the *Medical Press* and *Freeman's Journal*, by Mr. Denis Phelan, late Poor-law Medical Inspector, in which he indirectly imputes to you a disregard of the health of the poor in your workhouse, and in the same manner attributes to the Poor-law Commissioners a lax and negligent supervision. He goes into long and jumbled statistics to bear out his views, which I believe to be incorrect. I feel that my reports for the last three years are accurately correct, and challenge still further inquiry. Some three years since Mr. D. Phelan attacked my reports, and asked was there no inspector or auditor to check my inhuman treatment of the poor. Mr. Phelan then forgot that he had been an inspector occasionally visiting the Longford Workhouse for four or five

years after I adopted my non-alcoholic treatment of febrile diseases, yet he found no fault with my treatment, or management of the hospitals under my care.

My Lords and Gentlemen,—It might be well if you would communicate with the Poor-law Commissioners with the view of having an investigation as to the correctness of Mr. D. Phelan's imputations; as for me I court inquiry, I dread it not; your dietary is as good as in the generality of workhouses, and I was the means of having it twice improved, compared with the original dietary, which was, I believe, made out by Mr. Phelan. The women and children are in as good condition as in any other workhouse, and I daresay there are as many very old men and women to be seen in your house as any other with equal numbers.—I have the honour to be, my lords and gentlemen, your very obedient,

S. Nicolls, M.D.

The following resolution was unanimously adopted :—

"Resolved—That the Board of Guardians of Longford Union, are perfectly satisfied with the manner in which the Fever Hospital patients are treated by Dr. Nicolls, their medical officer, and that the remarks made therein by Dr. Denis Phelan, published in the *Medical Press* of the 8th May, 1867, and *Freeman's Journal* of the 20th May, 1867, are unfounded and uncalled for."

Reviews.

THE IRRITABLE BLADDER: its Causes and Treatment. By F. J. Gant, F.R.C.S. Second Edition. London: Churchill and Sons.

We have been much interested and instructed by reading Mr. Gant's clearly written little work. An important feature in the book is the way in which practice is based upon sound and extensive pathological knowledge. This remark applies not so much to the special treatment of irritability of the bladder (which, by the by, is not so fully given as we should have expected), but to the treatment of diseases which are at all connected with, or are likely to induce that malady. The faults in the mode of living where civilization exists are largely discussed, and rules laid down for the prevention of their consequences by dietetic and hygienic means. The third section of the work, which is devoted to the detection and treatment of the different diatheses and urinary deposits is instructive as a whole, but we must disagree with the author's views with regard to phosphatic urine, and express our surprise at his use of the term "phosphatic diathesis," which we think is, to a great extent, exploded.

A less special title might have better agreed with the general character of the work, and, therefore, we recommend our readers to peruse it, not so much for the treatment of irritable bladder as for a clear insight into the pathology and non-surgical treatment of urinary diseases.

ON HAPPINESS: its Relation to Work and Knowledge. By the late Sir John Forbes, M.D., F.R.S., Physician to Her Majesty's Household. London: Simpkin, Marshall, and Co.

This is a second edition of a lecture delivered before the members of the Chichester Literary Society and Mechanics' Institute, some years ago, and which was published, in the first instance, at their request. The subject of it, accompanied by the living voice, must have made a powerful impression upon the audience, and cannot fail, from the manner in which it is treated, to interest the general reader, by showing him that he may derive pleasure—even happiness—from those very things which he is apt to look upon with ill-humour, and to consider the hard necessities of his existence. Work, and the attainment of knowledge, which often press heavily on the individual, and sometimes sink him down into despondency, may both, under certain conditions, not only minister to his wants, but become a source of real and lasting enjoyment to him. The author clearly shows in what manner this may be done. He defines happiness; explains in what it consists; refers to the faculties with which the Creator has endowed us, and considers that these two are mutually dependant the one upon the other; that is, that the proper and legitimate exercise of all his powers is the constant and copious well-spring of enjoyment for man.

In proof he refers to our bodily frame. An examination of its exquisite machinery, he says, confirms these general views. We see how each function is related to another; how they all help each other; and how their natural action is attended by gratified feelings. He admits that they may be abused, and that ill-health or unhappiness is the consequence; but he thinks that in a normal condition they may almost always be made a source of enjoyment to us. He remarks :—

"If all men were fully aware of what constitutes the due and moderate exercise of their faculties, and if they were permitted by the conventional usages and restraints of our artificial modes of life to regulate their conduct accordingly, and had the courage and constancy to do so under the guidance of their reason, I believe that they might pass through their allotted period of time, free from most of those maladies which now so grievously interrupt their comfort and usefulness, and so greatly abridge the natural period of their lives."

Next he proceeds to the mind, and glances rapidly at its several faculties, those most obviously connected with the bodily organs, and those which constitute man a moral and social being. These, especially the perceptive and reflective, are capable of unbounded activity, which is seen in the child, and equally in the boy, and which follows him into manhood, prompting him to whatever he undertakes, and yielding him, in the employment of those powers, the happiness they were evidently designed to give. All this he illustrates by a reference to facts; to the personal experience of his hearers; and to the several classes of mankind; thereby proving that a great part of the happiness enjoyed by men is derived from what is usually termed *work*, and that "its amount is proportioned to the activity of the exercise (under due limitation) and the number of the faculties so engaged."

He takes occasion, particularly in this part of his address, to refer to the labouring population, which forms one of the most important classes of the community, inasmuch as every other is more or less dependant upon it. Very few of the means of enjoyment come within its sphere, and we give a quotation showing the views of the writer on this point:—

"A labourer's life, framed according to the *ideal* of it, which might be deduced from the principles discussed in this lecture, ought to be a happy one; as it ought to supply, or might be made to supply, in abundance, all the materials requisite for the production of happiness.

"The only conditions are—1st, That the bodily labour should not be too severe for the bodily powers; 2ndly, That its duration should not be too long within a given period; 3rdly, That it should be broken by occasional interruptions, to afford the necessary relaxation to the muscular system.

"It forms no part of my present office to inquire whether or not these conditions are fulfilled in the actual state of society. It will be more in accordance to consider what I believe to be the main cause why the actual state of the labourer as to happiness, is so far below that of the ideal one just sketched.

"The cause I believe to be ignorance, or the want of knowledge, and would be almost as operative as it is now, even if we could truly say (would that we could!), that all the conditions above enunciated as requisite for making labour suitable, were exactly fulfilled. From want of knowledge, or, to express my meaning more accurately, from want of mental cultivation, the labourer is at present deprived of half the pleasure that should be the accompaniment of his bodily labour, and of much more than half the pleasure that ought to be his share in the hours of relaxation. It is, indeed, most melancholy to think that there should exist in any civilized nation, a large proportion of the population whose enjoyments can scarcely be said to partake of a mental character at all, or only of the lowest degree to which this epithet can apply. The subject is too painful to dwell on: but it is one, I hesitate not to say, which is a blot on the escutcheon of humanity itself, and, next to actual slavery, cries the loudest for redress. That the sole remedy to be found for such a giant evil—education, should be witheld for a single day, while civilized, and instructed, and Christian men are debating over trifles—trifles, surely, when compared with the great thing at issue—is what requires to be seen and heard to be believed."

The lecturer then guards his hearers against the mistakes which are made by men in the pursuit of happiness, chiefly as regards the employment of their powers, and points out the best means of regulating and exercising them, so as on the whole to realize the greatest enjoyment they were designed to give. And lastly, he considers the aid afforded to the cause of human happiness by institutions such as he was addressing.

They provide for the exercise and improvement of the mental faculties; they furnish the means of rational amusement; they convey knowledge, and especially scientific knowledge; all which points are presented by the lecturer in his own impressive way, and he concludes, by a reference to himself, for the encouragement of the younger part of his audience as follows:—

"And now, my young friends, I turn once more to you, begging pardon of your seniors for the egotism in which, on *your* account, I am about to indulge. But knowing well how much more what may be called a *living illustration* of a fact or principle impresses the mind, than a mere didactic enunciation or even demonstration of it, I wish you all to understand that what you have heard to-night is, in some respects, a transcript from the book of my own life. In no slight degree, owing to the practical influence on my mind of the principles enunciated, my life has been, thank Heaven, a happy one; insomuch, that I am prepared to say with the great Franklin, that if the impossible could be made possible, and it were offered me to begin my mortal career anew, I would not hesitate to accept the boon, desiring no other alteration in its course and quality but the correction (as Franklin said) of those *errata* of conduct which, on looking back, I regret to see disfiguring not a few of its otherwise fair pages."

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The Medical Press and Circular.

"SALUS POPULI SUPREMA LEX."

WEDNESDAY, JUNE 19, 1867.

THE RECENT EPIDEMIC IN DUBLIN.

In our present number we present our readers with the conclusion of our report of the important debate on this subject. We say advisedly *important debate*, because the epidemic had taken such hold on the public mind as to lead to a pointed question being put to Lord Naas in the House of Commons; and this question was none other than whether the "Black Death" had re-appeared in Ireland?

In our number for the 29th of May we gave, in a leading article, a summary of the literature of this subject which had previously appeared in our columns, and we may now briefly recite the names of the contributors of the papers in the order in which they were published—viz., Drs. Darby, Lyons, Banks, Little, Ridley, Benson, jun., and Belcher. In that article we refrained from expressing any opinion on the nature of the disease until it had been fully investigated by the Medical Society of the College of Physicians of Ireland, and the reader who may refer to our numbers for the 29th May, the 5th and 12th June, and also to our present number, will find in them further important papers or speeches by, or communications addressed to, the following gentlemen:—Surgeon-Major Cogan, Dr. Gordon, Censor of the College of Physicians; Dr. Lyons, Dr. John Hughes, Surgeon Haverty, 52nd Regt.; Mr. Croly, F.R.C.S.I.; Drs. Stokes and Hudson, Dr. Atthill, Registrar of the College of Physicians; Dr. Darby, Dr. Warren Crooke, Dr. Belcher, Censor of the College of Physicians; Professor Law, Dr. Quinlan, Professor Aquilla Smith, Dr. M'Swiney, Dr. Bennett, Dr. Grimshaw, Dr. Little, Dr. Henry Kennedy, Dr. Hayden, Dr. Moore, V.P. College of Physicians; Dr. T. More Madden, Professor Banks, Mr. Fleming, and Dr. Herbert, 85th Regt. Besides all these, will be found the admirable summary of Dr. Stokes, of whom it may well be said, "nil tetigit quod non ornavit," and who may be looked on as a peculiarly representative man at this juncture, seeing that he combines in his own person the offices of Physician to her Majesty, Regius Professor of Physic in the University of Dublin, President of the Irish College of Physicians, and of its Medical Society, and President Elect of the British Medical Association; while he is a Fellow of the Royal and other learned societies, and holds the University Doctorate at Oxford, Dublin, and Edinburgh.

The "*Consensus Communis*" of the Medical Society of the Irish College of Physicians, has pronounced that there recently has been a strange epidemic in Ireland; that the disease in question is *not* the "Black Death;" and that it is not to be called by that most misleading and terrifying title. Further, the general opinion seemed to incline to the view that it was a form of fever in which the cerebro-spinal affection was a secondary disease; that it was not ordinary typhus or measles; that it was blood-poisoning; and that there was no reason to say that it might not be of a contagious character. The President also observed, "that in some of the worst cases the symptoms of spinal arachnitis were absent, and if, as some supposed, the ecchymosis and eruptions were due to the disturbance of the nervous centres, they should have found, in the worst cases of the disease, the greatest amount of lesion, but the fact was not so. But [further observed the President], although this disease of cerebro-spinal arachnitis had been naturalized amongst us for years, it was only during the last year that the disease, marked by this singular eruption, had occurred." Finally, the President said that, in his opinion, "this was a disease of the blood of an essential nature, and that the cerebro-spinal arachnitis was unable to explain it." He proposed, with apparently general consent, to call it "Malignant Purpuric Fever."

We have mentioned the President's views specially,

and we forbear to mention the opinions of others, because we could not, in the space at our disposal, specify the views of all, and we do not wish to make any selections. It was, however, apparent that three views of the nature of this disease were advanced. One, that it was a malignant spotted fever; a second, that its essence was a cerebro-spinal arachnitis; and the third, that the two diseases co-existed, the one being superadded, as it were, to the other. The generally rapid and fatal nature of the cases was admitted, and, we may add, that while the epidemic has by no means disappeared from Dublin, where we saw a case of it a few days ago (and one which went far to prove its contagious nature), yet its mortality has diminished according to that general law which seems to hold good with all epidemics; and by virtue of which those first visited mostly die, and those who have the fortune to be the last visited, mostly recover. We may call particular attention to the valuable historical information supplied by Dr. A. Smith, as to the existence of the "Black Death" in Ireland, an alleged fact almost unknown to Hecker, and which, as was remarked by Dr. Madden, seems to have been wholly passed over by the writers of the "Annals of the Four Masters," the standard authorities in ancient Irish history.

On comparison of the reports which we now conclude with the reports of the Medical Officer of the Privy Council respecting the epidemic called cerebro-spinal meningitis, lately prevalent in parts of Northern Germany, and about the Lower Vistula, we must express the opinion that the view of the recent epidemic in Dublin, taken by Dr. Stokes, is most probably correct in its essence, and that the disease in question was not unknown to Cullen, Mason-Good, and other standard writers, as a blood poison called by various names, such as "febris inflammatoria putrida," "typhus scorbutica," and "febris scorbutica." Indeed, the last-mentioned name may perhaps fairly be applied to it, judging from the clear description of the affection so designated in the learned work of Daniel Sennertus "De Scorbuto," published in 1654.

THE COUNCIL OF THE ROYAL COLLEGE OF SURGEONS IN IRELAND.

We recorded, in our issue of the 5th inst., the assembly of the Fellows of the Royal College of Surgeons in Ireland, for the election of their Council for the ensuing year, and referred to the fact that the outgoing Council had been replaced in the administration of the College, although, in addition to the ex-Councillors, nine Fellows offered themselves to the Fellows for election. We think it right now to review this decision, not only in reference to the simple facts, but to views entertained and expressed by certain of the Fellows, in respect to the constitution of the Council. The unanimity which prevailed at the previous meeting of the College, when the Annual Report was presented by the Council for the consideration of the Fellows, taken with the fact that a week later the charge of the Collegiate interests was confided to the same gentlemen, may be accepted as a vote of entire confidence in the Council, and as such, calls for some very forcible reasons why any of its members should be displaced to permit of the substitution of another Candidate.

The view which the Fellows of the College entertain, and in which we entirely concur, is that the first and paramount consideration is the maintenance of the College in a state of efficiency as an Educational body, and the sustainment of its qualifications at the highest standard possible under existing circumstances. If the Council of the College have proved their desire and their power of attaining the result, it should be for some very important object that its constitution should be disturbed, or its unanimity interfered with. We cannot, therefore, subscribe to the principle that Councillors who had secured an essential experience in the management of the College ought to retire to admit any gentleman, whatever his social or professional qualities may be; or that, in a selection of such vital importance to the interests of the College, the principle of rotation is a good reason for disturbing the integrity of the Council. The candidate who combines a disinterested judgment, a mature experience, and an earnest desire for the welfare of the College, possesses qualifications superior to those of party, and certainly superior to the simple claim of inexperience which seems to guide the votes of certain electors.

In enunciating this principle, we recognise, of course, the validity of the argument, that when the qualities which we have indicated can be obtained, every section of the College, and every important interest amongst its members, ought to be represented in the Council—a principle which is universally accepted by all classes. We simply combat the idea that any candidate should be selected simply because he has not previously served.

These observations are suggested by the fact that the non-acceptance of two provincial candidates was interpreted as a slight to the country Fellows generally, and such an opinion was publicly expressed by one of those gentlemen, and we take the occasion to deprecate that interpretation, and especially the language in which it was put forward. We can conceive no course more injurious to the College itself, or more fraught with danger to its efficiency than that which has been pursued, of making a distinction of interests between the Metropolitan and Provincial Fellows. Such a line of argument can tend only to the introduction of two rival factions

in the College, a result which can serve no one's purpose but that of the few who raise the cry. We venture to declare that the Metropolitan Fellows have not only declared, but proved their desire for the assistance of their provincial brethren. There are, of course, obvious circumstances which must prevent any large number of country Fellows from offering themselves for election, or being very regular in their attendance at the Council, and this fact gives a colour to the attempt to prove that their co-operation is unwelcome to their metropolitan brethren. We venture to repudiate such a conclusion, and to point to the constitution of past Councils in evidence of the fact that the provincial Fellow who occupies a position such as enables him to accept and fill the office of Councillor, runs even a better chance of being placed in that position, than his metropolitan *confrère*. The good sense of the provincial Fellows will see the propriety of submitting the problem to a practical solution on the first fitting occasion, instead of receiving from any individual candidate a statement which it will be easy to prove is groundless, and which is fatal to the good feeling which ought to exist between all co-members of the College.

THE APPOINTMENT OF MEDICAL ATTENDANT TO THE MOUNTJOY PRISON.

During the past few days a rumour has gained currency that the Government contemplate not filling up the post of Visiting Physician to the Female Convict Prison, rendered vacant by the lamented death of Dr. Banon, but appointing a Resident Medical Officer instead.

We are convinced that, in thinking of this arrangement, the Government are actuated simply by a desire to do what is best for the prisoners, and we can easily understand that, on a superficial view, many plausible arguments will suggest themselves in its favour; we are certain, however, that if carried out they will soon see reason to regret it. Never having ourselves had an opportunity of becoming familiar with the duties of the situation, we have made some inquiries, and, as far as we can ascertain, they are these:—The medical attendant has to visit daily the patients in hospital and prescribe for them; he has to examine all those prisoners who complain of illness, to ascertain whether they are really ill or only malingering; he has to see those who, for some transgression of the rules, have been placed on bread and water in the punishment cells; and lastly, he has to offer such suggestions to the authorities as his professional knowledge may enable him to give as to the diet, labour, lodging, and general treatment of the convicts—the object being to punish criminals in as perfect accordance with their sentence as possible, to interfere as little as possible with the terms of that sentence, and yet to see that their physical health and mental integrity are not compromised. The man to whom the discharge of such duties is committed should possess not only a thorough acquaintance with his profession, but he should have that knowledge of human nature which constant intercourse with society can alone supply, that good sense, and tact, and temper, and freedom from whims and crotchets, which make the successful practitioner in the ordinary walks of the profession. If a visiting attendant is again appointed, the Government will have no difficulty in finding some Hospital Physician or Surgeon, who enjoys the confidence of his brethren and the public, in the post; but if, instead, they seek for a Resident Medical Officer, they must content themselves with some one whose qualifications, or rather whose want of qualifications, unfits him for the open field of professional competition, and who seeks a post where his inferiority may conceal itself. Under the contemplated arrangement, it is true, the medical attendant of the Male Prison will visit the Female one and supervise, we presume, the resident official. In Dublin we believe there is no one who has greater capacity for work, and better habits of business, than Dr. McDonnell, a gentleman who, despite his numerous engagements, has found time to distinguish himself highly in the difficult and too little cultivated path of original experimental research. But we presume that if visiting attendant to both prisons, containing, independent of their numerous staff, one thousand human beings, he could only be expected to see those who were actually in hospital, and the more delicate and difficult, and equally important duties, would of necessity be committed to a man who, whatever his original character and qualifications, could not long continue to look at things with his own eyes, but would gradually fall into the opinions, whether right or wrong, of the prison officials. The public look with a certain amount of suspicion on the Convict Establishments, immured within their walls hundreds of men and women, for whose crimes against society, society is not itself quite irresponsible. See two persons, and but two, who are not part of the prison staff—the chaplain and the physician—and the public have invariably felt that these two men, who were part of themselves, who had a reputation in ordinary life (as they should have) for independence of character, sagacity, and humanity, would not be parties to anything which the laws of the land did not sanction. We feel no hesitation in making these remarks, because the prison, the appointment to which is now under consideration, is one, against the management of which there has never been the slightest complaint, but there have been complaints against other convict prisons, and the evidence of the Medical Officer has always been received by the public as the testimony of a man who, having the advantage of full knowledge of the discipline and treatment of the criminals, was not yet mixed up in such a way with the department as to render him interested in screening abuses, if they existed. We sincerely hope, therefore, that the Chief Secretary, whose sole object, we are convinced, is the good of the criminals, will see the expediency of continuing the present arrangement.

Notes on Current Topics.

University of Cambridge.—Mr. Danby of Downing College, who was first in the Natural Science Trips in 1864, has been appointed Lecturer in Natural Science in Trinity College. This is the first step towards the teaching of these sciences in that great college, and, we doubt not, will be attended with very good results. Mr. Higgins, who obtained one of the Natural Science Scholarships in Sidney College, has just been elected to a Natural Science Scholar-

ship, of the value of nearly £100, in Downing College. The examination was open to Undergraduates of Oxford as well as Cambridge. Mr. Douglas and Mr. Anningson, of Caius College, has obtained the Mickleburgh scholarship for proficiency in Chemistry and Anatomy in that college. There will be an examination in Natural Science at Sidney College on October 8, for two scholarships of the value of £40 a-year each. It will be open to all persons who are not members of the University. Further information may be obtained from the Rev. J. C. W. Ellis, tutor of the college.

Cholera in London.—Two cases of Asiatic cholera are reported as having been admitted into the London Hospital last week, one of which recovered and the other died in ten hours.

East London Water Supply.—Captain Tyler has been engaged, under the instructions of the Board of Trade, in inquiring into the quality of the water supplied to the metropolis by the river Lea. This we have already noticed, but in his report he discusses at some length whether the polluted condition of this stream was the cause of the fearful mortality from cholera last year in the east of London. He considers that it affords a "case of grave suspicion," though he cannot say that this water was the "principal cause" of that terrible epidemic. Leaving the river and the reservoirs of the company, he proceeds to the localities where the water is used, and here he finds a state of things which would hardly be believed. At Butler's buildings 250 people were living in fourteen houses, with less than a gallon of water each per day. Nearly the same deficiency was found in other places, and instead of proper cisterns for the water, such things as butter-firkins, tar-barrels, wine-butts, were used in all conditions of filthiness, leakiness, and rottenness, which must contaminate the water as soon as it leaves the pipes. Besides this he found 500 cases where there is only one service pipe for four or more houses. All this, which must interfere with the health and well-being of the neighbourhood, he considers the landlords responsible for in great measure, not excluding in some instances the water company; while in all he blames the parish authorities, who have the power, under the Metropolitan Water Supply Act, of remedying these evils.

Honours for Medical Men.—The feeling of the English people appears to be against the multiplication of orders of honourable distinction, but it should be remembered that almost an exclusive monopoly of such dignities is enjoyed by one class. We have the Orders of the Bath, the Victoria Cross, and the Star of India, as incentives to valour, but we have no acknowledgment whatever but an occasional baronetcy, for the equally arduous and infinitely more useful public services of professional men. The law, it is true, has the substantial pecuniary reward of the Bench as a goal to be reached, but the self-sacrifice, the talent, or the labour of medical men, can look to no better public recognition than the earning of fees. A doctor begins as a student, labours as a doctor, and dies as a doctor, with the same honour, as far as the public are concerned, no matter whether his career be one of lazy obscurity or uninterrupted service to the public. The presentation of the decoration of Grand Officer of the Legion of onour to M. Nélaton, for his attention to the Prince Imperial of France, suggests these considerations. Can any one doubt that M. Nélaton prizes such an honour more than fees, or that every medical man who reads the record of the honour will experience an emulative spark. Why is it that we have nothing better to look forward to than monied obscurity?

The British Pharmacopœia.—It has been determined to distribute copies of the last edition of the Pharmacopœia to foreign learned societies, with the view to afford opportunity of discussion on the composition and action of remedies.

Compulsory Vaccination in Ireland.—The Ballinrobe Guardians afford a cogent illustration of the unsuitableness of such a tribunal to carry out the sanitary enactments, which, in many instances, have unwisely been confided to them. It is not surprising that a saving of three halfpence in the pound in the local taxation, should be a grander object to such custodians than the saving of life from small-pox, and we trust that, in future legislation in such matters, the mistake will not be committed of confiding its enforcement to such hands. The Ballinrobe Guardians have been called upon by the Poor-law Commissioners to exercise their powers under the Vaccination Act, and have replied by the following resolution:—

That this Board feels that it would be unjust towards the heavily taxed ratepayers of this union to impose upon them any portion of the costs attendant on prosecutions under the Vaccination Act, more particularly as the ratepayers are suffering severely from lately increased taxation, chiefly attributable to the expenses of the Medical Charities Act, while the poor generally complain of the little benefit they derive from a system which has inflicted upon them heavily additional taxation. That this Board, therefore adheres to the resolution passed on the 23rd ultimo, and declines to institute proceedings without a guarantee from the medical officer.

REPORT OF THE COMMITTEE
ON THE
VISITATION OF EXAMINATIONS.
SUBMITTED TO THE MEETING OF THE
GENERAL MEDICAL COUNCIL OF EDUCATION AND REGISTRATION.

The Committee, in terms of the reference to them by the Council, having read over and carefully considered the whole of the Reports of the Visitations of Examinations for the last two years, beg now to make such suggestions, founded on the various Reports of the Visitors, as appear calculated—

1. To remedy defects in particular Examinations, and
2. To improve generally the Examinations for the Licence to practise medicine and surgery.

The Committee will first make a few comments on the reports of the visitors, under the heads of the several Licensing Bodies, and will subsequently refer generally to some special matters which have arisen out of the consideration of the reports.

SPECIAL SUGGESTIONS.

I. The English Licensing Bodies.

The Royal College of Physicians of England.

The Committee observe that this College have discontinued their own preliminary examination in Arts, and now require that every candidate for their licence should produce evidence of his having passed one of the preliminary examinations recognized by the Medical Council. It is probable that their example will be gradually followed by the other licensing bodies, other than Universities; if so, it

will be necessary that the Medical Council, in this and in other similar cases, should take care to see that the recognized Examinations in Arts include all the subjects required by them, and are in other respects deserving of recognition. But this subject belongs rather to the Committee of the Council on Preliminary Examination than to this Committee.

The Committee observe that, in the professional examinations, at each table, only one examiner, who may have been the teacher of the candidate, without any Assessor, examines the candidate on each subject, and gives his decision separately, and not necessarily after consultation with any other examiner. The Committee think it highly desirable on all accounts, that there should always be present at each table at least two examiners, who may decide upon the merits of the candidate after consultation. The same remark applies to the examination of some other bodies.

It appears that the anatomical examinations are conducted without the aid of anatomical dissections and preparations. Such an examination cannot be an efficient test of the anatomical knowledge of a candidate, and requires to be amended.

The Committee observe that no separate decisions are given in the written, the oral, and the clinical examinations. They consider it preferable that each should be judged separately.

The Royal College of Surgeons of England.

In the report for last year the visitors stated it as their opinion, that the College examinations would be improved were the physiological examinations made more extensive, and were the surgical examinations to include a practical examination in surgical appliances, bandaging, &c. This year the Committee are glad to observe that the College have given effect to the recommendations of the visitors. The anatomical and physiological examinations seem now to be very efficient. The same may be said as to the surgical practical examination, though, perhaps, it is capable of being extended still further by causing the candidate to trace on a living man the lines of incision in amputations, deligation of arteries, &c. It would be desirable, too, were it practicable, to introduce operations on the dead body. It would also be extremely desirable to have clinical surgical examinations introduced into the College of Surgeons' examinations as is now the case with many of the licensing boards. A difficulty may be found in the large number of candidates to be examined; but in London, where the hospitals are large and numerous, some arrangement might possibly be made by which each candidate might be made to show in one or more cases his knowledge of diagnosis. The matter is worthy of the attention of the College of Surgeons, and as they have already introduced clinical examinations into their fellowship examinations, they will doubtless, when possible, extend them to the candidates for their licence.

Society of Apothecaries.

In the reports of 1865-6 the visitors made various suggestions, and the Committee find, from the reports of 1866-7, that the Society have carried them out almost in their integrity. The Committee trust that the introduction of Clinical Medical Examinations will be also eventually adopted by the Society.

The reports concerning the Universities of Oxford, Cambridge, and London, require no remarks.

The University of Durham.

The professional examinations are satisfactory, and to be noted especially for their practical character. The preliminary examination, as at present conducted, does not seem satisfactory. It does not include the requisite number of subjects, and in some instances the questions are not up to the standard the Council desires to see. Dr. Embleton stated to the Committee that he was sure the University would improve this examination before next year.

II.—The Scottish Licensing Bodies.

University of Edinburgh.

The Committee need only observe that the Clinical Medical and Surgical tests, introduced of late years into the examination of the University of Edinburgh, have been carried out without difficulty and with great advantage.

University of Aberdeen.

The reports of this University are satisfactory. The examinations are well carried out and are highly practical. In certain cases candidates have been exempted from oral examination on account of the excellence of their written answers; but the Committee are of opinion that the recommendation of the General Council in this matter should be adhered to, and that no candidate should, in any case, be exempted from oral examination.

University of Glasgow.

The professional examinations are satisfactory. The preliminary examination in arts appears to be defective; the papers are too elementary in some respects, and the candidates appear to have been allowed to pass too easily in some instances. Professor Thomson assured the Committee that the University would take the matter into immediate consideration, with a view to the improvement of this examination.

The Committee observe that the custom of exempting candidates from parts of the degree examination, on the ground of high merit in class examination, which was commented on by the visitors of last year, has been now discontinued. The reports of the visitors on this University are defective in not including any notice of the examinations in Botany and Chemistry. The Clinical Surgical and Medical Examinations, lately instituted, are highly efficient.

University of St. Andrews.

No report has been made on this University.

Royal College of Physicians of Edinburgh.

The Committee regret that no visitation of the examinations for the single licence has yet been made; but they hope the Scottish Branch Council will arrange that this omission shall not again occur. It is understood that there is no practical Clinical examination at present. The Committee trust that the College will take into consideration the propriety of following the example set them in this respect by so many other licensing bodies.

Royal College of Surgeons of Edinburgh.

The examination for the single licence was only reported on last year, and even then not completely. Judging from that single report, the number of written questions seems to have been too small; but Dr. Andrew Wood stated to the Committee that since last year the number of questions had been increased. The College have not hitherto instituted Practical and Clinical Surgical Examinations; but the Committee are informed that arrangements have been made for commencing them at the Autumn examinations, on a plan similar to that pursued at the University of Edinburgh.

Double Qualification of the Royal Colleges of Physicians and Surgeons of Edinburgh.

The preliminary examination and the second professional examination have been reported on, and are satisfactory so far as they go; but the professional examination, to be complete, requires that practical examinations in Medicine and Surgery shall be introduced. The first professional examination has not been reported on.

Faculty of Physicians and Surgeons of Glasgow.

No report has been given of the preliminary examination in Arts. The reports on the professional examination show them to be satisfactory as far as they go; but here also there is a want of Practical and Clinical Medical and Surgical examinations.

III.—The Irish Licensing Bodies.

In some respects the reports of the Irish examinations are defective, so that it is difficult for the Committee to make a sufficient report on all of them. They trust the attention of the Irish Branch Council will be seriously directed to this matter.

University of Dublin.

The Committee observe that by Act of Parliament a Student may commence his Professional Study without a previous examination in Arts; the occurrence is rare, but the committee think attention should be called to it. The mode of carrying on the oral examination is peculiar to this university. It is conducted in class, and the committee believe cannot be so efficient as the ordinary method of examining each candidate apart. This examination is conducted in public.

The practical and clinical examinations in surgery are excellent, and the committee observe that operations on the dead body are required. There are no clinical examinations in medicine. A chemical laboratory has been recently erected by the Provost and Board of Trinity College, for the instruction of the students in practical chemistry; and Dr. Apjohn has informed us that the examinations in chemistry will henceforward be so conducted as to meet the acquirements of the students in the practice as well as the theory of the science.

Queen's University in Ireland.

The Committee are informed that a student may follow his professional studies for two years before passing his preliminary Examination in Arts. The attention of the University should be directed to this as being inconsistent with the recommendation of the Medical Council.

The oral examinations are reported by the Visitors to be too short. There are operations on the dead body, but there are no clinical medical or surgical examinations.

King's and Queen's College of Physicians.

The Preliminary Examination in Arts is left to other Bodies. It would appear that there is no written Professional Examination, but from the unavoidable incompleteness in which the report is made, the Committee are unable to form any correct opinion of the Examinations of this Licensing Body.

The examinations are open to all Fellows and Licentiates of the College.

Royal College of Surgeons.

There is no Report on the Preliminary Examination. The number of written questions in the First Professional Examination is small; there are only two questions in Anatomy, one in Physiology, and one in Materia Medica, and one hour only is allowed for the answers. At the oral Examination it appears that there is only one Examiner at each table, and the decisions are given, without conference, by simple "yes" or "no." The Committee have learned from Mr. Hargrave, that since the visitation, the decisions are made by marks, and that a member of the Council sits at each table with the Examiner. The second Professional Examination, in Surgery, Medicine, and Materia Medica is conducted exactly in the same time and manner. There is no mention of Practical and Clinical Medical or Surgical Examinations. No Teacher is allowed to be an Examiner.

Apothecaries' Hall of Ireland.

No report has been made on the Examinations of this Body.

GENERAL SUGGESTIONS.

Combination of Licensing Bodies.

Referring to the number of Licences, the Committee are of opinion that the Council should strongly encourage every effort now being made, or about to be made, under Clause XIX. of the Medical Act to combine the Examinations of the Licensing Boards, so as to secure that every practitioner whose name appears on the Register shall have been tested in all the branches of the Medical Profession. It is of importance that the Licensing Bodies, at present too numerous, should be concentrated by such combinations. The Examinations would thus be more easily supervised, and there would be a better guarantee for efficiency.

Practical Examinations.

The Committee are of opinion that Practical Examinations are highly desirable in all the subjects in which they can be employed, and that in no other way can the Examinations in these subjects be made completely satisfactory.

Under the term "practical" would be included all the Examinations in which a Candidate performs experiments or operations, or describes dissections or drugs, or performs post-mortem examinations, or examines with the microscope, or points of the like kind. It will be well however to illustrate by a Table more particularly what is meant.

SUBJECTS.	PRACTICAL WORK.
Chemistry	Actual Laboratory work.
Materia Medica . . .	Actual compounding of prescriptions; Pharmaceutical processes; naming and describing drugs.
Botany	Recognition, and description of plants.
Anatomy	Dissections, and preparations.
Medicine & Clinical Med.	Examination of patients; microscopic and chemical examinations; pathological specimens.
Surgery & Clinical Surgery	Examination of patients; pathological specimens; bandaging, &c.; operations on the dead body, &c., &c.
Midwifery	Operative Midwifery on models.
Forensic Medicine . .	Laboratory work, microscopical and chemical examinations.

It is satisfactory to find that less difficulty has been experienced in arranging for such examinations, than had been anticipated. The methods employed by different bodies are somewhat different, but the results in each case have been satisfactory. While the Committee express their satisfaction at this improvement, and their hope that progress in this direction may continue, they do not advise that any rule should be laid down, or suggestions as to the mode of conducting these Practical Medical and Surgical examinations, or as to the extent to which they should be carried. When the reports of all the visitations have been sent to the licensing bodies, the several methods now followed by some, will be considered by all, and the best parts of each plan adopted.

The Written Questions.

The Committee have been impressed with the importance of having the questions put in the most precise manner, so that the candidate may understand exactly what he is required to answer, and may be able to give precise and concise replies. They refer to the mode in which the questions are put by Professor Christison (*vide* the report on the University of Edinburgh, April, 1866), for examples of the plan which they think might be followed with advantage in many instances.

The attention of the Committee has been called to the necessity of preventing copying. Among other means, the arrangement of candidates by numbers or alphabetically has been found useful in detecting collusion.

The Committee have found it inconvenient not to have the questions attached to all the reports of the visitors, and they advise that this should be done, at any rate for next

year, in order to afford data for judging of the amount and quality of the written tests.

The Oral Examination.

The Committee recommend that not less than two examiners should be present at every oral examination of a candidate. A decision should be based on the opinions of both examiners after consultation.

Uniform Standard of Judging the Results of Examination.

In several of the reports, viz.—on the Society of Apothecaries, London, on the College of Surgeons, England, and on the University of Aberdeen, reference is made by the visitors to the advantage of some uniform standard. There may be difficulties in framing one which is free from objection; but there is no doubt that even an imperfect rule is better than none at all, and the Committee decided by a large majority that such a standard is desirable.

In making the following suggestions on such a standard, the Committee regard them as merely the means of eliciting the opinions of the licensing bodies, on a matter of great importance. In placing a scheme before them, and entering into some detail, the Committee do so merely as a basis for discussion, and in the hope that it will lead eventually, to a common action on the part of all the licensing bodies.

The numerical method of estimating the results of an examination is the most accurate and the most free from objections; it is now employed in all the Government Competitive Examinations, and is also used by the majority of the medical licensing bodies. The mode of using it, however, is different in each case; but, as the principle has been admitted by so many licensing bodies, it is believed that they will raise no objection to making such alterations as may render the results of the examinations comparable. Those licensing bodies which use such expressions as good, moderate, bad, or *optime*, *satis bene*, &c., not resting on a numerical basis, will, we conceive, have no difficulty in fixing a corresponding numerical value.

The method usually followed when a numerical standard is used, is to assign to each subject a certain number of marks which represents the total number which a candidate can gain in that subject if he answers the questions as perfectly as is possible in the time.

But there are advantages in another plan, viz.—fixing the number of marks according to the time during which the examination is carried on, so that the total number of marks indicates at once the length of time the candidate is under examination, as well as the character of the answers.

The advantages of this, for the purpose of the Medical Council, will be best seen by an example.

Supposing the first plan to be adopted, and on the subject of surgery for example, a total of 1000 marks is allowed by all the licensing bodies, no comparison is still possible between the results; for one body may give the whole 1000 marks to an oral examination only; another may distribute them among a written, an oral, and a practical examination. In the record, however, as presented to the Medical Council, the candidates from each body may appear to have gained an equal number of marks although the examinations have been widely different in severity.

This is avoided by the system of marks for time.

Supposing 100 marks are given for every hour of written examination in surgery, 200 for every hour (or in proportion for less periods) of oral, and 200 for every hour of practical examination; the numerical record of such examination will at once show the nature of the examination, and its different parts will be comparable with each other, no matter what the respective arrangements of the two licensing bodies may be.

For example, one licensing body may choose to give, on a particular subject, three hours of written, and fifteen minutes of oral examination. The records of its marks would show 300 for the former, and 50 for the latter. Another body might give two hours written, fifteen minutes oral, and half-an-hour practical examination, the marks being 200, 50, and 100, or the same as in the former case, only differently distributed. The parts of the two examinations are then comparable.

The plan will in fact be found to show not only the standard of proficiency, but the differences of the examinations, and it has the advantage of not fettering too much the opinions and methods of examination of the different licensing bodies.

The number of marks to be assigned to a particular time is a matter of importance. They should not be too few, or the wide differences of different candidates will not be properly indicated, they should not be too many, or they become unwieldy. The written examination also ought to have fewer marks assigned to it, in a given time, than the oral and the practical. The Committee believe that the best plan will be to assign 100 marks per hour for the written examination on every subject, leaving it to the examiners to fix the number of hours, and the number of questions in the hour, and the marks to be given to each question, it being understood that the whole 100 marks must be assigned between the questions, or be given to one question if there be only one in the hour.

In the oral and in the practical examination double the number should be given, or 200 per hour. Thus, if a candidate is under examination for fifteen minutes, he could gain 50 marks as the maximum; if for thirty minutes, he could gain 100. The Committee believe this may afford an approximate expression of the numerical relation between the respective tests of the written and oral methods.

The Committee would recommend, in the event of a numerical plan being approved of, that each licensing body should keep a book with the marks properly arranged in a form, in which three subjects only are introduced as an illustration.

This record would show at once both the kind of subjects and the time occupied in each.

With regard to the minimum percentage of marks qualifying for the licence, whatever numerical method may be adopted, the Committee consider it desirable to ascertain the opinion of the licensing bodies.

It may be objected to the plan now submitted for consideration, that different examiners will assign different values to answers. This objection is inseparable from the system of examinations, and applies to all modes of expressing results. But the mere fact of an examiner having to keep a fixed numerical value before him, will be found to be of the greatest use to himself, and, after practice, it will be found that the opinions of good examiners are singularly accordant. If also, in all cases, two examiners examine every candidate, and come to independent conclusions before final judgment, the system will soon be found to work with accuracy, and to afford trustworthy results.

The Choice of Examiners.

There is a very great diversity in the mode in which the examiners are selected by the different licensing bodies. Sometimes they are persons unconnected with the licensing body, but chosen by it to serve for a specified time from one to five years. In other cases, the professors of a university either examine alone, or with the assistance of examiners who are not professors. In other instances again a corporation appoints examiners from its own body, and these serve for various periods. There is, in fact, a great diversity in the modes of appointment, and the examiners of different bodies are necessarily persons of very varying capacity and experience. To attempt an alteration in one body without altering all would be invidious, and the Committee refrain from offering any suggestion to any particular corporation. But the Committee believe that, when practicable, the following points should be attended to in the selection of examiners:—

1. There should be some teachers in every examining board.
2. The appointments of those examiners who do not

belong to the licensing body should be for a definite period, with power of re-appointment.

The Committee have only, in conclusion, to express the hope that the reports of the visitors for next year, together with those of previous years, will be such as to place before the Council a full view of the system of examination, in all its branches, pursued by all the licensing boards. That progress has already been made in the improvement of some of the examinations since the commencement of the Visitations by the Medical Council is obvious ; and it is no less obvious that much still remains to be accomplished, especially in the way of extending practical examinations in all departments.

The Committee recommend that a copy of this report, as submitted to the Council, be sent to each of the licensing bodies, with the request that they will express their opinion regarding the suggestions contained in it on or before the 1st January, 1868. The Committee further suggest that the answers received from the licensing bodies be thereafter printed and circulated amongst the Members of the General Council.

ANDREW WOOD, *Chairman.*

JUNIOR SURGICAL SOCIETY OF IRELAND.

THE annual *couversazione* and distribution of prizes took place on the 7th, in the Royal College of Surgeons, Stephen's Green.

Dr JAMES STANNUS HUGHES presided.

Amongst those present were—The President of the College of Surgeons (Dr. Adams), Drs. Stoker, Minchin, Fleming, Baker, Macnamara, A. Jacob. Macalister, Mapother, Croly, Quinlan, O'Leary, Hewitt, Benson ; Major Knox, Mr. Rickard, M'Carthy, &c.

Officers elected for the Session of 1867-8 :—Council—Messrs W. Tobin, E. Blakeney, W. Geoghegan, J. W. Martin, A. A. West, J. H. Lyddon, Raye, J. Backhouse, P. Bodkin, C. G. Purcell, J. J. Marshall, R. W. Kelly. Secretary, Mr. William Tobin.

The following prizes were awarded :

Surgery—1st prize, A Pocket Case of Surgical Instruments, presented by Dr. Tufnell, awarded to W. Tobin. Ditto, 2nd Prize, a Silver medal, presented by Dr. Croly, awarded to R. MacCarthy.

Practice in Medicine—1st prize, a silver medal, presented by Dr. Benson, awarded to W. Tobin.

Physiology and General Pathology—1st prize, a silver medal, presented by Dr. Mapother, awarded to R. MacCarthy.

Chemistry of the Materia Medica—1st prize, a silver medal, presented by Dr. Barker, awarded to J. Backhouse.

Anatomy (Human or Comparative)—1st prize, a silver medal, presented by Dr. Macalister, awarded to R. MacCarthy.

Fractures—A prize of £2 2s., presented by Dr. J. Stannus Hughes, awarded to Mr. J. O'Brien and W. Geoghegan.

The prizes were then awarded.

Dr. Benson having been called to the second chair,

Dr. ADAMS briefly addressed the students, impressing on them the necessity of establishing for themselves a character of industry while they were still students, which would be beneficial to them afterwards when they became physicians and surgeons.

Dr. HUGHES then said—The council of this society have requested me, as one of their presidents, to distribute the prizes which have been awarded for the best paper on special subjects during the session just expired, and I have accepted the office with pleasure, believing as I do that the Junior Surgical Society is a credit to its parent, namely, the Surgical Society of Ireland, which, as you all are aware, stands second to none in the empire for the diffusion of sound practical knowledge. The Junior Surgical Society has now been in existence for five years, during which period many valuable papers have been read and discussed by the members with forbearance and gentlemanlike tone, the evident object of all being the elucidation of truth. Here, as in the Surgical Society of Ireland, debate but not discussion is discountenanced. Here there has been found from first to last an entire absence of jealousy and personality ; thus the objects of the society have been fulfilled in the most satisfactory manner, proving that honourable rivalary amongst students as well as amongst practitioners is quite compatible with friendship ; and hear permit me to impress upon you that by a friendly and gentlemanly competition your success and happiness in this world as professional men shall be best secured. The business of the past session has, I am happy to say, been carried on with more than ordinary zeal, the society having held eleven meetings, at which twenty-four papers were read, the papers exhibiting strong evidences of close attention to hospital cases, as well as research and original thought. Indeed, as a rule, the style and matter of the papers have many merits to reccommend them. There can be little doubt that the talent and industry exhibited at the evening meetings in this theatre during the past session must sooner or later be crowned with success elsewhere. I trust that next session even more competitors will appear in the field. The society is open to every school and hospital in Dublin ; but I may be told that it is not every man who can write a good paper on any given subject. Now, to such a student I would say, with your note-book in your hand (and I never knew a man succeed in his profession who did not, as a student, note down his cases during his hospital attendance), with the best monographs within their reach, and with a due consideration of the cases before you, you can overcome many of the difficulties in your path ; and, after all, as has been said by a learned author, perhaps the greatest of pleasures are the pleasures of difficulty. They are the greatest in number and degree, for we meet with nothing more frequently than difficulties ; and the highest of all pleasures is the consciousness of having surmounted them, and the next best is the satisfaction of having made a gallant though unsuccessful attempt to do so. To the unsuccessful candidates I would say—persevere, and determine to fail no more, by which means you shall soon be enabled to submit to your fellow students a series of practical papers. With respect to the value of taking notes of our hospital cases, many indeed are its advantages. Thus, it teaches us a proper method of interrogating the patient with respect to the anterior history of his case and his present symptoms ; it enables us to cultivate exactness in language ; it adds to our experience, which, as Liston well remarks, is nothing more nor less than a collection of facts, whether gathered together in five or in fifty years ; and, lastly, note-taking brings us more directly in contact with the patients—it insures their confidence, and naturally induces us to sympathize with and use our most strenuous efforts to alleviate their sufferings. With respect to the deep sympathy which should, and I hope always does exist on the part of medical men towards their patients, but which for obvious reasons should not at all times be exhibited—how often have I heard my professional brethren most unjustly abused for their apparent want of feeling towards their patient ; but how truthfully and beautifully has Cowper the poet answered that uncalled for charge when, in speaking of the members of our noble profession, he describes them as

> "Men who conceal their feelings, but who feel
> The painful symptoms they delight to heal."

And here I would observe, that the best competitive paper is not necessarily the most original, but it may be the means of enforcing the opinions of others in so lucid and practical a manner, more especially when illustrated by cases in point as to merit the observations of the late justly celebrated thinker and writer, the Rev. Sidney Smith, when he says, "That man is not the discoverer who first says the thing, but he who says it so long, so loud, and so clearly, that he compels mankind to hear him." Permit me here to allude to the blow we have so lately sustained by the sudden death of Dr. Banon, the Vice-President of the College, whose loss will long be felt by the profession at large. For seventeen years Dr. Banon was my colleague at Jervis-street Hospital, where, by his mild and gentlemanlike manner, his untiring kindness to the poor, and his skill as an operator, his memory will long be cherished by his patients and colleagues. The crowds innumerable of friends and admirers who followed Dr. Banon to his last earthly home, proved the high estimation he was held in by his fellow citizens of all ranks of life. Let us all endeavour, by following his good example, to earn for ourselves the high character he established for himself both with the profession and the public. I beg in the name of the Society to thank the distinguished President of our College and the visitors for their encouraging presence here to-night. To the Presidents of the Junior Surgical Society the council feel greatly indebted for having in their turns presided so efficiently over the evening meetings. (Applause).

A vote of thanks having been passed to Dr. Hughes, the proceedings terminated.

Correspondence.

POOR-LAW MEDICAL OFFICERS' ANNUITY SOCIETY.

TO THE EDITOR OF THE MEDICAL PRESS AND CIRCULAR.

SIR,—Some two years ago or more, I requested the attention of the Poor-law Medical Officers of Ireland, through your columns, to the expediency of establishing an Annuity Society for the widows and children of such of their members as are left insufficiently provided for, and I pointed out the arrangements that were made for a similar purpose by the Irish Constabulary Officers. As no steps have been since taken, that I am aware of, to accomplish that object, I take the liberty of again pressing the subject on the serious consideration of the Dispensary and Workhouse Medical Officers of Ireland, and I do so the more as they are now rather better enabled to contribute to the necessary fund than they were at that time, and I hope that the payment of half the cost of the medical relief, which is given through the Poor-law department, will soon increase their incomes.

As the Constabulary Officers' department is so analogous to that of Poor-law Medical Officers, I will describe what has been done by the former, having, through their kindness, been supplied with the resolutions and reports of "The Irish Constabulary Officers' Widows Annuity Society," which was formed in August, 1862, and rules adopted for its regulation.

One rule is, that a subscription of threepence in the pound on the pay of every officer, who shall join the society, be levied to form a fund, to be collected by monthly instalments for one year; and another, that the scale of payments fixed on be adopted as the annual income of the society, to be deducted monthly from the salary of each officer. By the 4th rule, these sums are to be invested by trustees for the use of the society. The 5th rule provides that, in consideration of the sums so paid, the widows of officers of *all ranks*, who shall continue to be members, shall be entitled to an annual pension of £40; if the wife dies before the husband, the £40 is to be continued to the children, until the age of eighteen, and on the widow's death, the pension is continued to the children till eighteen.

The trustees are Sir H. Browing, Inspector-General, and eight other officers of the force; and Mr. Maunsell, one of the first-class clerks in the Constabulary Office, is the Agent of the Society, the Honorary Secretaries being N. B. Galway, and W. D. Roche, Esquires. These respectable names show that the objects for which the society was formed, are likely, or sure, to be carefully attended to.

The parties that are entitled to admission into the Society are—1. All the Heads of the Department, including the Inspector-General; 2. All the Clerks in the Department at Dublin Castle; 3. The County Inspectors, and the Sub-Inspectors of each class; and 4. Resident Magistrates appointed from the force since 1858. All these number 295, in round numbers, say 300, of which the County and Sub-Inspectors constitute about 268, whose individual salaries range from £100 to £298, the majority having from £100 to £180. The *married* of the £180 class, for instance, pay £5 annually; that of the £100 class pay 30s., or 1¼ per cent. The unmarried of each class pay only half as much as the married.

At the expiration of the first year, 288 had become members —175 married, 113 unmarried. This, at 3d. per pound, brought £524 19s. 7d. as the commencing fund, and the payments under the annual scale amounted to £831 17s.; total, £1356.

The second year's report shows 290 members—176 married, 114 unmarried. £903 was received, and £795 was funded, making in all £2672 then vested in Government Securities. Four members had died in the first year; in the second year four died. The receipts were £924 18s., of which £712 was funded, after payment of all expenses. Three members died in the next year; £955 was received, and £642 was funded. Since the last July meeting, eight more members died, making in all eighteen widows, one of whom died. The funded property is now £3400, and this year's receipts likely to be £1000.

These data afford much useful information to parties who contemplate the formation of any such society. They show that during the four years 172 per cent. of the members died annually, and that the funded property of this society is considerable.

The question to be considered is, how far the rules of this society are applicable to the condition of the Poor-law Medical Officers of Ireland. Last year's Poor-law Report shows that there are 785 Dispensary Medical Officers, whose salaries amounted to £70,843, with vaccination fees, £7944; total, £78,787, or an average of nearly £100 each. I hope and believe that each makes an average of at least £100 yearly by his private practice; and I think it may be safely assumed that each Workhouse Medical Officer receives as much—*i.e.*, £200 yearly.

I am unwilling to trespass too much on your space, and will reserve for another letter what I have further to offer on the subject.—I am, &c.,

DENIS PHELAN.

ARMY MEDICAL DEPARTMENT.

TO THE EDITOR OF THE MEDICAL PRESS AND CIRCULAR.

SIR,—My attention having been called to a return made to the Honourable the House of Commons, on a resolution moved by Mr. Squan, M.P., of the number of assistant-surgeons promoted to the rank of surgeons annually for the last ten years, I addressed a letter to Dr. Logan, the Director General of Army Hospitals, on the subject of the slow promotion of Military Assistant-Surgeons, in the hope of being enabled to give some statement—as to the prospects of young medical officers now entering the service, of promotion in any reasonable term—to the Irish Medical Association at the annual meeting on the 3rd inst.

I have had the honour, subsequent to the meeting, of receiving the enclosed letter from the Director General, and request you will have the kindness to publish it with the proceedings of the annual meeting of the Irish Medical Association in your next publication of THE MEDICAL PRESS AND CIRCULAR.—I have the honour to be, dear sir, yours very faithfully,

THOMAS L. MACKESY,
President of the Irish Medical Association.

[COPY OF LETTER.]

"SIR,—I have the honour to acknowledge the receipt of your letter of the 25th May, and, in reply, to inform you that the subject of pay, promotion, and retirement of medical officers of Army and Navy, was recently fully considered by a committee appointed for the purpose at the suggestion of the Royal College of Physicians, and upon which that College, and also the Royal College of Surgeons, was represented by a Fellow of each.

"The committee's report, drawn up after taking evidence on the subject, has been accepted by the College and the Profession generally, as offering a reasonable solution of the points at issue between the Profession and the Military and Naval authorities, and their recommendations are now in course of being carried out.

"With regard to the returns laid before Parliament, the number of promotions in each year is not a reliable means of testing the probable rate of such promotion, inasmuch as, in such a calculation, no note is taken of casualties arising from other causes—such as death, resignation, and retirement upon half-pay, &c., all of which contribute to advance the juniors to the top of the list.

"I have to add that at present assistant-surgeons of twelve and a-half years service are getting their promotion, and that, considering they thus attain the relative rank of major, they are as a rule considerably in advance of their combatant brethren, and have, in consequence, no cause of complaint on this ground, which is not equally applicable to all other branches of the service.—I have the honour to be, sir, your obedient servant,

B. LOGAN, Director General."

A DESCRIPTION OF SAN REMO.

TO THE EDITOR OF THE MEDICAL PRESS AND CIRCULAR.

SIR,—As your journal has, on several occasions this year, contained articles upon the influence of climate on disease, and as I am now spending a few weeks in London, I hope you will find room for a few particulars respecting the progress of San Remo, my beautiful home in Liguria.

Among the English physicians who have resided with us, I would first name Dr. Prosser James, who has written in his "Climate of San Remo, and other Winter Stations of the Mediterranean," a full account of the mildness and healthfulness of this place, and predicted that it would become a favourite winter residence with his countrymen. This predic-

tion, derived from his personal residence in the winter of 1862–3, has already been accomplished to a great extent, and fully proves his acumen.

At present, the comforts and conveniences which that author pointed out as wanting to induce English invalids to visit San Remo are accessible.

Several lodgings in the immediate neighbourhood are available for winter visitors, and more of them are now building, so that it is easy for a stranger to choose whichever locality best suits his health. Thus the nervous, hypochondriacal, hysterical patient will find a pure atmosphere suited to his excessive sensibility, and the sight and perfume of flowers will relieve his sufferings. On the contrary, torpid and lymphatic constitutions, and incipient, tuberculous, pulmonary disease will also find airy and elevated situations. These villas are charming ones, and form a pretty garland round our town, and afford the comforts required by persons accustomed to elegant life. The public walks, in the midst of a luxuriant country, are spacious, bordered by long avenues of trees and influenced by the beauties of the surrounding nature. Lately a site in the centre of the town has been bought for an English Church, the plan of which has been confided to the architect Signor A. Cantù.

A committee has been formed for the erection of a new theatre. There is some agreeable society, and last winter there were several balls in the Count Roverizio's palace. There is a newspaper, *San Remo*, in which are published meteorological observations made daily by Chev. P. Rambaldi, president of Royal Lyceum.

There are two steamboats—"San Remo," and "Oneglia," which several times in a week sail to and from Genoa and Marseilles, so that the means of importation are easy.

In short, a real progress exists, which, under the auspices of the Mayor, Signor Corradi, and the present municipality, grows rapidly, and the great part of the population is full of hopes for a prosperous future.

The description I here offer of San Remo is poor enough. Nevertheless, in consideration of the difficulty with which I write your language, I hope to be excused. Only my love for San Remo prompts me to inform my English *confrères* of our progress.

G. B. Pantzzi, M.D.

London, June 12, 1867.

CANDIDATES AT ST. ANDREWS UNIVERSITY.

TO THE EDITOR OF THE MEDICAL PRESS AND CIRCULAR.

I wish to direct attention to the regulations as to the necessary course of study to be pursued by all candidates, previous to their being admitted to the final examination for the M.B. and C.M. degrees at the University of St. Andrews.

The Royal Commissioners under the University Reform Act have ordained :—

"That all candidates for the M.B. and C.M. degrees—

"1. Shall pass an examination in the following branches of education, if possible, previous to their commencing their Medical Studies :—English, Latin, (Greek,) Arithmetic, the Elements of Mathematics, and the Elements of Mechanics.

"2. No candidate shall be admitted to a professional examination for either of these degrees who has not passed a satisfactory examination in at least two of the following subjects, in addition to those above :—Greek, French, German, Higher Mathematics, Natural Philosophy, Natural History, Logic, or Moral Philosophy."

This examination to take place, as far as possible, prior to commencing the attendance on the Medical Curriculum.

By the Commissioners' Ordinance, every candidate for the M.B. and C.M. degrees shall give evidence, by certificates, that he has attended, during four *anni medici*, one of each of the above courses ; at least two of the *anni medici* must be attended in one of the Universities of Scotland, or of Oxford, Cambridge, Dublin, or the Queen's Colleges in Ireland. The other two *anni medici* may be passed in the Hospital Schools of London, the School of the College of Surgeons, Dublin, or under such private teachers of medicine and surgery as may from time to time be recognised by the University Court.

Attendance during six winter months on the medical and surgical practice of a general hospital accommodating at least eighty patients, and, during the same period, six months of practical anatomy, will be accounted an *annus medicus*.

Attendance on the lectures of any recognised private lecturer in Edinburgh, Glasgow, or Aberdeen, shall be held as another *annus medicus*, if the fee charged for such courses of medical or surgical lectures *is not less* than is charged for the same courses in the Universities of Edinburgh, Glasgow, or Aberdeen.

Thus, after passing the preliminary examinations, and completing the four *anni medici*, by attending at least one course of prescribed lectures, the candidates for the degrees may be examined at the end of the second *annus medicus* on the first section of subjects—viz., Chemistry, Botany, Elementary Anatomy, and Materia Medica ; and at the end of the third *annus medicus*, on the second section—viz. : Higher Anatomy, Zoology and Comparative Anatomy, Physiology and Surgery. Or on both sections at that time ; and at the end of the fourth *annus medicus*, on the third and last section—viz. : Practice of Medicine, Clinical Medicine, Clinical Surgery, Midwifery, General Pathology, and Medical Jurisprudence. Or the whole three sections may then be taken—the examinations being both written and oral.

As many enter the study of the profession, neither desiring nor expecting the degrees of M.B. or M.D., to whom the cheaper fees of the private schools are inducements, they can attend the absolutely necessary amount of university classes required by the Medical Curriculum, after the preliminary non-professional examination has been passed before or during the first *annus medicus*.

1. At St. Andrews, the first University *annus medicus* can be completed by attending the six months' courses of Chemistry, Anatomy, and Physiology. Natural History, Zoology, and Comparative Anatomy, for the final examination.

2. *An. med.* either at the University of Edinburgh or Glasgow, where the hospital attendance can be had during the winter session, with, at the private schools, Anatomy, Physiology, Materia Medica, and Surgery ; and, if with six months' Practical Anatomy, along with the hospital, this would complete the second *annus medicus* or,

If the Materia Medica for six months, and two three month courses of Botany and Medical Jurisprudence during the summer session, were attended in Edinburgh or Glasgow, then the second University *annus medicus* would be complete ; and the candidate, if well prepared, would be entitled to pass the first professional examination in Anatomy, Chemistry, Botany, and Materia Medica, before the commencement of the third *annus medicus*, and all the rest of the University restrictions would be loosed.

3. If, during the third *annus medicus*, the six months' Hospital and Practical Anatomy, and the other courses of the third division were attended—Practice of Medicine, Clinical Surgery and Medicine, Midwifery, General Pathology—after passing a satisfactory professional examination on Higher Anatomy, Zoology and Comparative Anatomy, Physiology and Surgery, with a competent knowledge of all the required subjects, the fourth *annus medicus* might be spent at St. Andrews, and the final examination for the degrees of M.B. and C.M. take place; and if the examination is satisfactory, and the full age of twenty-one, the degrees might be conferred during the April of fourth *annus medicus*, or within three years and a-half from their first entering the University. But if a competent knowledge of all the subjects of Medical and Surgical Education has not been acquired, the classes on these must be continued during the fourth winter session, and the final examination on the Practice of Medicine, Clinical Medicine, Clinical Surgery, Midwifery, General Pathology, and Medical Jurisprudence. All these three sectional examinations may be passed under the St. Andrews Medical Faculty, with the assistance of those additional examiners appointed by the University Court.

I now point out to another class of candidates who may have passed the matriculation examination of the London University, from one of the affiliated provincial or the London hospital schools, for two *anni medici* ("the *annus medicus* being constituted by two courses of six months, 100 lectures each ; or one such course, and two three month courses of 50 lectures each"). The other two *anni medici* could be completed by two winter sessions in Edinburgh or St. Andrews, and the M.B. and C.M. degrees, after a sufficient final examination, in the course of April, in one year and a-half after entering the University of Edinburgh ; and by registering in St. Andrews, the whole three divisions of the examinations may be held by the St. Andrews examiners, according to the regulations.—I am &c.,

William MacDonald, M.D., F.R.C.P.E.,
Professor of Natural History, Zoology,
and Comparative Anatomy.

United College, St. Andrews, June, 1867.

CASE OF CHOLERA IN DUBLIN.

We learn with regret that a case of well pronounced Asiatic cholera has occurred on Sunday last in Pembroke-road, under the care of Dr. Peter Little, of Dominick-street. The attack was sudden and violent, and was attended by the usual symptoms of rice-water vomiting, cramps, *facies cholerica*, and collapse. Happily the patient has survived, and is now convalescent.

PAYMENT OF MEDICAL WITNESSES IN IRELAND.

The Council of the Royal College of Surgeons in Ireland have had under their attention this question, and, with a view to the settlement of it by the insertion of a clause in the Common Law Bill now passing through Parliament, a deputation from that body has waited on Mr. Colles, the taxing master. It appears that the Judges in Ireland have no power to order payment to medical men as English Judges have, and in the schedule of payment, which it is proposed to insert in the new Act, the remuneration is named at not less than one guinea, and not more than three, with one guinea per day travelling expenses. The Attorney-General and Chief Secretary for Ireland have been so constantly employed that they have found it impossible to receive a deputation from the Council in Dublin, and Dr. Hargrave, Mr. Hughes, and Dr. Quinan, have proceeded to London for the purpose of having the clause introduced in the Bill, which comes on for a second reading on Thursday next. We understand there is every reason to hope that the object will be attained.

Medical News.

Lady Medical Students.—It seems that the judicious provision of the Apothecaries' Society requiring all ladies desirous of taking their licence to practise, to pursue their studies in the recognised Medical Schools, will not always act as a deterrent, at all events for those of them who may come from the other side of the Atlantic. A lady, it seems, is unblushingly attending anatomical lectures in Paris, in the midst of a crowded class-room, and is thus tenderly dealt with by one of the Paris Medical journals, *a la mode de Paris*:—"An American doctress is at the present time attending Professor Fort's course of anatomy. She is remarkably intelligent, young, and good-looking, and is getting on very rapidly. If there is anything remarkable about her amidst her male fellow-students, it is the unaffected impassibility which she maintains during the various descriptions which an anatomical course necessarily entails." We cannot but believe that many of the students really bent upon work must regard the presence of this pretty little dear as an intolerable intrusion.

St. Bartholomew's Hospital.—The statistical tables of the patients treated in the wards of this institution during the past year, prepared by Dr. Edwards and Mr. Willett, have just been issued. The number of patients admitted was 5088. The patients remaining on the 1st of January, 1866, amounted to 527, bringing up the total number under treatment to 5615. Out of this number 3980 were discharged cured and relieved, 250 were discharged unrelieved, 277 were discharged for other than medical reasons, and 563 died. Out of the 2224 patients treated in the medical wards, 1323 were discharged cured and relieved, and 418 died. Thirty-six, or 8·61 per cent., died within twenty-four hours of admission. Out of the 418 deaths in these wards, 71 were the result of consumption, 64 were caused by diseases of the respiratory organs, 42 by cholera, 36 by albuminuria, and 29 by fever. Cancer of the internal organs contributed 23 deaths. Out of the 3391 patients treated in the surgical wards, 2657 were discharged cured and relieved, and 145 died. Thirty-three, or 22·8 per cent., died within twenty-four hours of admission. Out of the 145 deaths in these wards, 30 were the result of fractures, 23 were caused by burns and scalds, and 10 by cancer of the external organs. The following is a statement of secondary diseases which occurred within the hospital among 126 patients admitted for other diseases:—Scarlatina, 16; typhus, &c., 15; cholera, 3; erysipelas, 31; cellular inflammation, 14; pyæmia, 17; rheumatism, 4; phagadæna, 1; gangrene, 2; and delirium tremens, 23. The report contains an elaborate series of tables recording the ages and occupations of the patients, extending over 72 pages.—*Times*.

Medical Charities.—We have great pleasure in announcing that the late John Gott, Esq., of Armley House, Yorkshire, has bequeathed £200 to the Leeds Infirmary, and £100 to the Leeds Public Dispensary. Miss Charlotte Raine, in addition to those large sums formerly mentioned as having been bequeathed by this benevolent lady, has also left £500 to the Metropolitan Free Hospital, and Joseph Cragg, Esq., has also bequeathed £500 to the Middlesex Hospital, all legacies to be paid free of legacy duty.

The Cattle Plague.—We learn with much pleasure, from a letter of M. Van Thal, that the cattle plague is decreasing in Holland, the return of cases for the week ending May 25 being the insignificant number 39. It is to be regretted that we cannot report as favourably of our own country. Since our last number a meeting of the Court of Common Council has been held, and information has been received that the rinderpest is making its way among us once more. Mr. Rudkin informed the chairman of the meeting that "the cattle plague has broken out in a most virulent form almost all over the metropolis, with the exception of the City of London." The authorities are adopting measures to prevent the further extension of the plague, and Orders in Council have been issued to prevent foreign cattle being driven through the streets of the metropolis to the cattle market.

Singular Fatality among Sheep.—On the arrival at Leith of the screw steamer *Stettin*, on Sunday afternoon, her captain reported that of about 600 sheep he took on board at Copenhagen, 111 had died and been thrown into the sea. The weather and behaviour of the vessel were all that could be desired, yet, from some unaccountable cause, many of the sheep sickened and died. After the vessel was in the dock two of the animals were found dead, and fifteen others so weak that they had to be carried ashore. A rumour has been circulated that the sheep were suffocated by being kept too close, but the report is without foundation, for the *Stettin* is capable of carrying twice the number of sheep she had on board.—*Scotsman*.

Chignons and Cookery.—According to the report of the Inspector of Nuisances for Bermondsey, an oven, situate at 65, Richardson-street, in that district, is employed during week-days in heating hair to destroy parasitic germs before it is converted into chignons, and on Sundays it is employed to cook the dinners of the poor. Who, we should like to know, is the humane and enterprising proprietor of this oven which is thus contrived "a double debt to pay?"

The Scottish Registrar-General's Return records 19,981 deaths in Scotland in the first quarter of 1867, being in the annual proportion of 25·1 deaths per 1000 of population. This mortality is above the average of the corresponding quarter of ten previous years, which was in the annual proportion of 24·6 deaths per 1000 of population. The annual mortality of the town population in the quarter ending last March, was 29·3 per 1000, while the annual death-rate among the rural population was only 17·5 per 1000. Bronchitis, pneumonia, and affections of the respiratory organs generally, have been very prevalent. Typhus and typhoid fever prevailed to a considerable extent over the country, also scarlatina, measles, and whooping cough. Cholera caused, in Scotland, 33 deaths during the quarter; 25 of which occurred in January, six in February, and two in March. In the month of January, in consequence of the severe weather, the deaths were double the usual number. In March, also, the frost was so intense, with east winds, hail, snow, and sleet, that all agricultural operations were completely stopped. The mortality in Scotland during the three months, was greatly influenced by the temperature. Thus in January, with a temperature of 31·8 degrees, there were 238 deaths daily. In February, with a temperature of 41·4 degrees, the daily deaths were 210; In March, with a temperature of 36·2 degrees, the daily deaths were 217. The mean temperature of the quarter was 36·5 degrees.

The Americans and the Cholera.—The Registrar of Vital Statistics of New York, Dr. Harris, has addressed to the Board of Health a letter, in which he says:—

"Since last fall the Asiatic cholera has been making progress in various countries, and both in Europe and America its smouldering infection has been rekindled in a few places. Important progress has meanwhile been made in the practical application of preventible sanitary measures to restrain and extinguish the epidemic. Waiting the completion of our full report upon these facts, the following brief summary of recent inflammation is submitted :—Several hundred scientific physicians in Europe have prepared reports upon their special investigations, experimental, microscopical, and chymical, in cholera. The grand conclusion of all the researches and all comparisons and analyses of experience relating to cholera may be summed up in these homely words—put out the sparks ; remove the local causes that increase and spread the epidemic. The fact that cholera is propagated and spread by an infective poison which requires the aid of certain local factors is fully established. That it is not contagious like typhus and small-pox, and that the infective property of the excremental discharges of the sick and of persons that have been recently exposed in places infected by cholera may be completely disinfected and destroyed by certain chymical agents, is the important truth which all classes of people should understand. Scientific chymists and experimenters and all sanitary officers now agree that saturated solutions of copperas and carbonic acid are at once the best and cheapest disinfectants that can be used against cholera. In every city that is now prepared to extinguish or prevent the epidemic there has been organized a system of medical relief and house-to-house visitation, to be ready beforehand for any event. St. Louis put its excellent system in operation soon after the first arrival of a cholera patient this spring from a down-river town. The disease did not extend to a half-a-dozen persons. St. Louis now is, and is likely to remain, one of the healthiest and safest commercial towns that one can visit in America, thanks to the Board of Health. Very early in the spring the epidemic was rekindled in certain towns on the Mississippi, south of Cairo, It was conveyed many hundred miles up the Arkansas River. and to certain points north-west on the Mississippi. But recent information warrants the hope that those outbreaks have been totally extinguished. Early in April an outbreak of cholera occurred in the city of Porto Alegre, in South America, and in a few days fifty cases occurred. This outbreak is supposed to be associated with German and French commerce that is held with that disturbed region. What intercourse has been had with infected West Indian or Central American ports does not appear ; and they, like the nearest European ports, are more than 3,000 miles distant, Porto Alegre being 34 degrees south of the equator, and not far north from Montevideo. About four weeks ago cholera reappeared in London and in Paris, but it is reported not to have spread to any extent. In the town of Elberfield, near the Rhine, and about 80 miles south-eastward from Rotterdam, the epidemic appeared, and has spread to some extent. That town is in a region that sends many emigrants to New York by way of Rotterdam and Liverpool. These facts can be understood by our people without awakening anxiety or fear, for to be "forewarned is to be forearmed," and although there may be numerous cases of cholera imported from the south and elsewhere, and though there may be repeated outbreaks in the lower regions of the Mississippi, the means of sanitary protection are definite, ample, and easily applied. But wherever, in places that are ready for the kindling of the epidemic, the true means of sanitary protection are not applied, the pestilence may yet make deadly ravages. The watchword of the Metropolitan Board of Health—"Timely and active preventive measures"—should be adopted by every city and town to which the epidemic can come.

THE CATTLE PLAGUE IN LIVERPOOL.—From investigations made at the request of private firms in Liverpool by Professor Gamgee, and other experienced gentlemen, it has transpired that the alleged case of rinderpest at Ullet-lane, Liverpool, was not a case of that disease. It is to be hoped, therefore, that the Privy Council will at once rescind the orders which, on the report being made, they have issued for restricting the sale of cattle in Liverpool.—*Times.*

NOTICES TO CORRESPONDENTS.

Communications to the London Editor should be addressed to 20, King William-street, Strand ; to the Edinburgh Editor, at Maclachlan and Stewart's, South Bridge; and to the Dublin Editor, at 3, Lincoln-place.

All Contributions are attentively considered, and unaccepted MSS. are returned on receipt of stamps for postage; but the Editors cannot be responsible for any accidental loss, nor can MSS. or replies be delivered on personal application.

Contributions should be *legibly* written, and only on one side of the paper.

When proofs are forwarded it is of the utmost importance that they should be corrected and returned without delay.

Mr. Harrison is thanked for his communication.

Mr. W.—We cannot undertake to introduce the subject to the parties mentioned in your letter.

C. E.—Yes, by Dr. Lane.

Chemicus.—The preparation is anything but first-class.

Several letters and important communications are unavoidably postponed.

ERRATA.—In the report of the proceedings of the General Medical Council, at bottom of page 5 of Supplement, for "Stale Medicines," read "State Medicine." On page 6, first col., for "Medico-legal forces," read "Medico-legal farces."

MEDICAL APPOINTMENTS.

EDIS, ARTHUR W., M.B., M.R.C.S.Eng., has been elected Physician-Accoucheur to the St. George's and St. James's Dispensary.

CHALDECOTT, H., M.R.C.S.E., has been appointed a Resident Physician's Assistant at the Middlesex Hospital, vice J. Murray, M.B.

FIELD, G. P., M.R.C.S.E., has been appointed House-Surgeon to St. Mary's Hospital.

ARMSTRONG, H. E., M.R.C.S.E., has been elected Resident Medical Officer to the Newcastle-on-Tyne Dispensary.

BENNETT, W. J., M.R.C.S.E., has been appointed House-Surgeon to the Dorset County Hospital.

STANGER, WM., M.R.C.S.E., has been appointed Assistant Medical Officer to the County and Borough Lunatic Asylum, Snenton, near Nottingham.

MANISTY, Mr. F. S., has been appointed one of the Resident Surgeons to the Birmingham Lying-in Hospital and Dispensary for the Diseases of Women and Children, vice Scatchard, resigned.

MOORE, W., M.R.C.S.E., has been appointed House-Surgeon to the West Hertfordshire Infirmary, vice J. P. Purvis, M.R.C.S.E., resigned.

SIMPSON, Mr. A. B., has been appointed a Resident Surgeon to the Birmingham Lying-in Hospital and Dispensary for Diseases of Women and Children, vice Dr. Macbeth, resigned.

THOMAS, M., M.D., has been elected Medical Superintendent of the Royal Infirmary, Glasgow.

MARTIN, ALEXANDER, A.M., M.D., L.R.C.S.E., has been appointed Medical Officer to the Combination Poor-house of Kincardineshire, situated at Stonehaven.

PATERSON, J., L.F.P. & S.Glas., has been elected Medical Officer for the Parish of New Monkland, Lanarkshire, vice G. Cowie, M.D., deceased.

Births, Marriages, and Deaths.

Announcements are inserted without charge, and must in all cases be authenticated with the signature of the sender.

BIRTHS.

JONES.—On the 2nd ult., at Cawnpore, the wife of J. Jones, M.D., Civil Surgeon, Cawnpore, of a daughter.

GRAHAM.—On the 27th ult., at Paisley, the wife of Dr. Graham, of a daughter, still-born.

HEDDLE.—On the 5th inst., at St. Andrews, the wife of M. F. Heddle, Professor of Chemistry in the University of St. Andrews, of a daughter.

MARRIAGES.

BLUNT—ROME.—On the 30th ult., at the British Embassy, Paris, Thomas Blunt, M.D., of Leicester, to Ann, eldest daughter of the late Joseph Rome, Esq., of Groundslow, Staffordshire.

DENTON—WILLIAMS.—On the 1st inst., at Cheltenham, T. W. Denton, M.D., of Newbold Lodge, Cheshire, to Sarah Ellen, widow of T. Williams, Esq.

SCLANDERS—MACKINTOSH.—On the 4th inst., at Auchnacloich, Nairn, A. Sclanders, M.D., of Forres, to Christina, daughter of the late J. Mackintosh, Esq.

JEAFFRESON—SQUAREY.—On the 6th inst., at Barnes Church, Horace Jeaffreson, M.D., of Westhill, Wandsworth, to Helen Mary, youngest daughter of the late Charles Squarey, of Salisbury.

GOGARTY—SANDERSON.—On the 6th inst., at Cottingham, H. A. Gogarty, M.B., Assistant-Surgeon 52nd Light Infantry, to Emily, only daughter of the late C. R. Sanderson, Esq., of Hull.

SANDWELL—CLARKE.—On the 8th inst., at St. Anne's, Soho, E. Sandwell, M.R.C.S.E., of Charles-street, Soho-square, to Mary Jane, second daughter of J. F. Clarke, M.R.C.S.E., L.S.A., of Gerrard-street, Soho. No cards.

TAYLOR—SOTHERN.—On the 5th inst., at St. Mary Abbotts Church, Kensington, J. M. Taylor, F.R.C.S., Royal Horse Artillery, to Mary Ellen Worrall, daughter of the late J. Sothern, Esq., the Priory, near Liverpool. No cards.

DEATHS.

BROMLEY.—On the 20th ult., at Calderbridge, H. W. Bromley, M.R.C.S.E., of Gosford, Cumberland, aged 39.

CUST.—On the 29th ult., J. C. Cust, M.R.C.S.E., of Barnard-castle, Durham, aged 50.

FERGUSSON.—On the 15th inst., of consumption, at Bloomfield Cottage, Girvan, Ayrshire, Jessie Muir M'Creath, wife of Alexander Fergusson, L.R.C.P., Ed., &c., aged 22—much regretted.

HOOD.—On the 2nd inst., at the Bedford Hotel, Covent-garden, D. Hood, M.D., Assistant-Surgeon, H.M. Bengal Army, aged 36.

RAMADGE.—On the 8th inst., at 12, Clarges-street, Piccadilly, F. H. Ramadge, M.D., in his 74th year.

TINKER.—On the 11th inst., at Acres Cottage, Hyde, Cheshire, Frederick Tinker, Esq., Surgeon, F.R.C.S., aged 63.

Lecture.

CLINICAL LECTURES

DELIVERED IN

STEEVENS' HOSPITAL,

TOGETHER WITH

OBSERVATIONS ON PRACTICAL MEDICINE.

By Sir HENRY MARSH, M.D., Bart.,

PHYSICIAN IN ORDINARY TO THE QUEEN IN IRELAND.

Edited by J. STANNUS HUGHES, M.D., F.R.C.S.I.,

PROFESSOR OF SURGERY IN THE ROYAL COLLEGE OF SURGEONS IN IRELAND, SURGEON TO THE LORD LIEUTENANT'S HOUSEHOLD.

REFLECTIONS ON THE CAUSES OF DROPSY.

(Continued from p. 575.)

"THE next case I shall record is one of great interest,—a case of extreme anasarca, the result of anæmia, and without organic lesion, occurring in an hospital patient. He was about thirty years of age, had never lived intemperately, and was superior to the generality of hospital patients in manner and education. His life had been spent in an office, at the desk, the nature of his occupation permitting him to take very little exercise. By long continued and frequently profuse bleeding from the hemorrhoidal vessels, he was reduced to a state of complete anæmia, and, owing to extreme debility, had been compelled to give up his situation as a clerk. When admitted into hospital he was universally anasarcous. The first signs of œdema manifested themselves in the lower extremities and face; his respiration was hurried; his pulse feeble and rapid; no murmur accompanied the cardiac movements, nor was there any auricular evidence of deposition in the pulmonary cells. The urine was scanty, low in density, and not albuminous. He remained for several days in hospital, and the symptoms not being in the least degree submissive to treatment, it was determined to give exit to the fluid by acupuncturation. Numerous punctures were made, during several successive days, in different parts of the body; the thin serum flowed freely; the anasarca subsided; the secretions became abundant; and the treatment ultimately issued in a complete restoration to health. His diet was gradually rendered more and more nutritious; he was allowed wine and malt liquor; and, after the operations, his medicines were iron and ammonia. I cannot avoid recording an emphatic expression used by this man. After having been twice acupuncturated, and when the serum was flowing profusely, I asked him how he felt? His reply was: 'Sir, I feel greatly relieved: when I was a boy, I wept from my eyes; now that I am a man, I weep from my whole body.'"

I also append the following observations, which were originally published with these cases, as they illustrate remarkably my present subject:—

"These cases illustrate the circumstances under which the operation of acupuncturation may be most advantageously employed; indeed the only circumstances which give to it a permanent value. It may often be practised usefully as a palliative: rarely, however, is it a curative measure. In dropsy from organic disease it removes the tension, and enables the blood to circulate more freely, so that the medicines may act, and the effused fluid be absorbed; but the organic disease remains, and the dropsy returns. In the foregoing cases there was no organic lesion, either cardiac, pulmonary, hepatic, splenic, or renal. The tension being removed, and the medicines enabled to produce their full effect, the serous effusion was absorbed, the constitution invigorated, the quality of the blood improved, and the cure rendered perfect. Far otherwise is it in those vastly more numerous cases of dropsy, resulting from morbid change and deposition in organs essential to life; in many of these, acupuncture is an useful adjuvant in the treatment, but it cannot remove the cause of the effusion.

"Trifling as this operation is, I have seen it followed by consequences the most disastrous,—erysipelas and gangrene, In advanced cases of dropsy, when the blood is much altered,—all but disorganized,—it is dangerous to puncture the skin. I have also seen cases in which, from the perpetual oozing of cold serum, the broken-down state of the health and of the blood, each puncture has been followed by a large and foul ulcer. In other instances of hopeless dropsy, even though the patient escape these grave consequences of acupuncturation, the limbs have been kept so constantly wet and cold as greatly to distress the patient and aggravate his sufferings. It requires, then, observation and judgment to distinguish the cases in which this remedy may be safely and successfully employed. It may be here remarked, that the more limpid and less dense the effusion, the more favourable is the case for acupuncturation. I have observed many cases of anasarca resulting from organic renal disease, wherein it required strong pressure to produce a pit or dimple; nay more, the limbs have been so rigid as to render the joints immovable, such has been the density and solidity of the matter which occupied the subcutaneous serous tissue.

"I saw, some years ago, in consultation with Sir Philip Crampton, a very remarkable case of anæmic dropsy: the patient was about thirty-five years of age; he had been reduced by long-continued and profuse hemorrhoidal bleeding to a state of extreme anæmia. The prominent symptoms were, death-like pallor, excessive debility, languor, constant dyspnœa, occasional orthopnœa, bellows murmur of the heart and arteries, universal anasarca, and peritoneal effusion. Sir P. Crampton, by an operation, put an end to the sanguineous exudation; whereupon a rally took place; and then tonics, diuretics, moderate stimuli, and nutritious diet, completed the cure."

Repeatedly I have witnessed the interesting phenomenon of red and white blood extravasations co-existing at the same time and in the same person. This occurs in purpura hæmorrhagica: the white blood extravasation, indicating the ruined state of the blood, takes place at an advanced state of the disease, and points but too surely to a fatal issue; whilst blood in its entirety is oozing in all directions from mucous surfaces, and staining with spots and ecchymoses the skin under the cuticle; the white portion of the blood, reduced to a state of the utmost tenuity, is occupying and distending the spaces of the serous membranes, both under the external skin and in the serous sacs or surfaces involving the internal viscera. The one from the mucous outlets generally escapes, whether the red blood flows from the nares, or intestines, or bronchi, or bladder, or vagina; after extravasation, it is expelled from the body—not so with white blood extravasation—into serous tissues. It is pent up; it cannot find immediate exit; hence the necessity of effecting its removal from the body, either by absorption, or by ulceration, or by instrumental operation.

The cases hitherto recorded have reference to *blood*, not to *visceral* disease. Of atonic dropsies, the first variety is the most amenable to treatment.

Dropsy, always formidable, assumes its most fatal aspect when linked with visceral disorganization. In such cases though it may often be removed, yet, the cause remaining—probably increasing in intensity—it will again and again recur; and this harbinger of dissolution at length refuses to yield to treatment, however varied. It often, however, claims the first and most important place in the adaptation of remedies. Hence the great variety of substances derived from the mineral and vegetable kingdoms which, possessed of diuretic properties, are earnestly sought after. It is a fact that diuretics must be varied: those which to-day are eminently successful will on a future day grievously disappoint expectation. Amongst diuretics, mercury holds and maintains the first place. There is, perhaps, no combination of medicine more frequently or surely to be relied upon than the diuretic compound judiciously administered—consisting in mercury, squill, and digitalis.

I shall not multiply cases of atonic dropsy, resulting from

intractable and destructive morbid action, affecting an important viscus, the normal functions of which are essential to the preservation of life. The *permanent* cure of dropsy depends upon the removal of its cause. If all treatment fail to remove the cause, the symptom, dropsy, will resist all efforts directed towards its *permanent* cure. It may often be temporarily removed, but if the cause remain, as surely as the tide which ebbs will flow again, so surely will dropsy, if the patient still linger on, reappear.

A case has but lately fallen under my observation of protracted disease of the alimentary canal: it terminated, after a long illness, fatally. For many weeks all solid and substantial food was rejected by vomiting: no articles of diet were retained except those which are lowest in the scale of nutrition, and, like an infant's food, in a highly liquid state; there was also a perpetually recurring diarrhœa. About a fortnight before the fatal termination of the disease, œdema, manifesting the signs of the thinnest serosity, appeared, though the patient had been previously, and was then wholly confined to bed, and always in the recumbent position, in the lower extremities: first, at the insteps and ankles, and, advancing hourly, reached the hips, and extended along the most dependent parts of the trunk. The dropsical distention was very great, and particularly in the lumbar region. In the superior extremities and anterior parts of the trunk, though present, it was less discernible. No doubt could exist that there was in this case organic disease of the stomach and extensive ulceration of the intestines. Everything essential to the production of atonic dropsy was in this case present.

Yesterday I took a brief note of the following case:—A gentleman, aged 64; his countenance expressive of malignant disease; food received into the stomach seems to himself not to descend; immediately on being swallowed it is rejected by vomiting; he is thus for the time relieved; the vomiting, at first slight, has lasted for four months; he is greatly emaciated; hiccups frequently; feels most easy when in bed; great debility referred chiefly to limbs; pulse very small; heart sounds feeble; urine natural; bowels regular; a soft, semi-transparent œdema fills up and distends the lower extremities, reaching half-way up the thigh.

To these many such like cases might be added. It is needless: they tend to confirm the view already put forward—namely, that the cases most apt to terminate in atonic dropsy are those which involve in morbid action the alimentary canal and its appendages.

Some persons are constitutionally, from temperament, liable to serous effusions. With such, a smaller amount of disease is capable of producing dropsy; at an earlier stage of a malady it will set in; moreover, the catastrophe of an hydropic effusion may, by general management, be either precipitated or retarded, or even averted. If the diet be well suited to the enfeebled digestive function; if the heart be not unduly stimulated by ardent liquors, by mental emotions and passions, by muscular exertions, and other such causes; and if quiet and recumbency be sufficiently maintained, these dropsical effusions may be postponed, or possibly even averted. Influenced by an opposite mode of management and treatment, it may be accelerated. This remark is applicable only to some forms of dropsy.

The rapidity with which I have sometimes observed a large effusion in a poor hospital patient to be carried off has surprised me. The influence of new and unaccustomed circumstances, the altered diet, the quiet and recumbency, have appeared to have been mainly instrumental in effecting this great alteration in the functions of the vascular system.

Some weeks ago a poor woman, affected with aneurism of the arch of the aorto, was admitted into Steevens' Hospital. The tumour pulsated vehemently and prominently. She suffered intensely from neural pains, shooting from the sternum to the spine, and along the left arm. She remained several weeks in hospital, and, feeling herself much relieved, she returned home. At the end of a month she was re-admitted. In the interim copious effusion had taken place into the infra-cutaneous serous tissue of the thorax and arm, on the left side. Whilst at home she was stinted in food, and it was not only scanty but coarse; she was also obliged to work. After her re-admission she remained quiet and recumbent, and her diet was carefully regulated. Scarcely had ten or twelve days elapsed until every trace of the effused fluid had vanished. It had so happened that the medicine ordered for her she had not taken.

In the cure of dropsy, treatment should not be restricted to medicine; systematic and dietetic treatment should never be neglected. I have said that dropsical effusions are influenced by temperament; it is also true that they are influenced by previous habits and manner of living. As far as my observation has reached, I should be disposed to assert that those *sudden* effusions into the ventricles of the brain, and also those into the pleural and peritoneal sacs, which occur in cases of renal, and sometimes in cardiac, diseases, are much less likely to occur in the atonic than in the obstructive and inflammatory varieties of dropsy.

Original Communications.

A CASE OF COCCYODYNIA CURED BY OPERATION.

By GEORGE H. KIDD, M.D., F.R.C.S.I.,
ASSISTANT MASTER TO THE COOMBE LYING-IN HOSPITAL, ETC.

(Read before the Dublin Obstetrical Society on June 8th, 1867.)

Coccyodynia is the name proposed by Sir James Simpson for a painful affection of the coccyx, of not uncommon occurrence, but not recognized or described in books, till he gave an account of it in the *Medical Times and Gazette* for 2nd of July, 1859. Since then Erichsen, in the fourth edition of his "Surgery," has given a short account of it, founded on Simpson's paper; and Dr. West has described it in the third edition of his work "On the Diseases of Women" under the more correct, but not so convenient term of coccygodynia, the name suggested by Scanzoni in a very elaborate paper published in the *Wurzburger Medicinische Zeitschrift*, and which has been followed by Dr. West in his observations. In this paper Scanzoni gives an account of twenty-four cases, but as many of them were accompanied by various affections of the uterus and neighbouring organs, and the pain ceased on the removal of the associated disease, they can scarcely be considered cases of the affection described by Simpson.

The leading symptom of the disease is, according to Simpson, pain in the region of the coccyx experienced by the patient whenever she sits down and rises, and sometimes while she remains in the sitting posture. Most of the patients affected with it are obliged to sit on one hip, or with only one side resting on the edge of a chair, or with the weight partially supported by a hand on the chair, and they are rendered sometimes very awkward and miserable in consequence, some of them actually dread sitting down, so great is the pain then felt, and not only so, but the pain is, in many cases, aggravated or renewed whenever it becomes necessary to resume the erect posture. There are other movements of the coccyx besides that are liable to be attended in such cases with pain. Thus, some patients have pain with every step they take in walking, while in others the movements of progression excite no uneasiness whatever. Others, again, feel the pain most when the bowels are being evacuated, or under any circumstance in which the sphincter or levator ani, or the ischio-coccygeal muscles are called into action.

The pain is not in every case very acute or intolerable and varies as to its severity in the same patient at different periods. It is always increased by pressure on the coccyx, and more so when the pressure is made from the point upwards; and it is also increased by moving the coccyx

with the finger, but the kind of movement that most aggravates the pain differs in different cases.

The pathological cause of the pain, according to Simpson, is disease of the coccyx or of the coccygeal joints, or inflammation of the surrounding fibrous tissues, arising in general from some injury inflicted during labour, or in some other way. In one of his cases it was caused by a fall from a horse. Two of Scanzoni's patients referred it to frequent long rides on horse-back. South mentions the case of a gentleman who fractured his coccyx by sitting down suddenly on the corner of a snuff-box, and who was ever afterwards obliged to wear a pad on each tuber ischii to keep off pressure.

In many cases the disease cannot be traced to any definite cause. One of Simpson's patients attributed it to sitting for a long time on damp grass. It may occur in the male or female, in the married or single woman, but the most frequent cause is injury to the part during childbirth. Of Scanzoni's twenty-four cases, eleven of the patients attributed the disease to this cause. When the diseased condition is once established every movement of the muscles, or structures connected with the coccyx, causes pain, and prevents the part from regaining a healthy condition.

For the treatment of the disease Simpson recommends the subcutaneous division of all the muscles and fibres connected with the coccyx, so as to isolate it and allow it to remain at rest, which he has found to give almost immediate relief in most cases, but in some it has failed, or the relief has only been temporary, the pain returning after a time. In one of the cases detailed in his original paper this occurred, and he subsequently removed the coccyx entirely, and I find, by a notice in the *Edinburgh Medical Journal*, that this woman was exhibited at a meeting of the Edinburgh Obstetrical Society on the 28th March, 1861, and she then stated that, "since the operation had been performed" (two to three years probably) "she had found herself perfectly well, and was now able to do all her ordinary work as a laundress, for which she had been utterly incapacitated."

M. Gosselin has recorded a case that he had under his care in the Hôpital Beaujon, in which subcutaneous section of the muscles was tried, but, he says, failed. Hesitating to adopt the extreme measure of removal of the coccyx, he again had recourse to palliative treatment, and suggested the simple use of an india-rubber air-cushion. "After the patient had steadily continued this plan for twelve days, she had so far lost her pains as to be discharged from the hospital in a fair way of convalescence, since nature herself, the stress on the parts being taken off, would doubtless complete the cure, under the favourable auspices of *rest*." M. Gosselin says it was found necessary to regulate the bowels by a rhubarb aperient, to prevent hard motions passing over the tender part.

The Editor of the *Gazette des Hôpitaux* quotes, in connection with this case, a similar one, cured, he says, in a similar way, which fell under his observation some years ago; but it will be observed that in M. Gosselin's case the cure was not by any means complete when she left the hospital, and in the case that has been recently under my care, a long continued and careful trial was made, before the operation, of india-rubber cushions, and other devices for keeping off pressure, without any benefit whatever.

Scanzoni states that leeches to the coccyx, tepid baths, warm fomentations, and, if the pain have a neuralgic character, subcutaneous injections of morphia, have seldom disappointed him in effecting a cure. He never found it necessary to adopt the subcutaneous section. I have already mentioned that in many of his cases the pain appears to me to have been only sympathetic or reflected, and I find that of the twenty-four cases but ten were cured, nine were relieved only, the result in three cases was not known, and in two the evil remained unrelieved by any treatment.

Mr. Bryant has published a case in which he performed the subcutaneous section with perfect success, and Dr. Godfrey, of Sonora, has published a case in the American *Journal of Medical Science*, in which he had operated also with success. The disease had lasted ten years, and the patient stated "that she had consulted a dozen of the best physicians in Tennessee, under whose treatment she successively was for a good while, without deriving any benefit from it, and finally they pronounced her incurable."

I have not been able to find in our systematic treatises or journals, any references to the disease beyond those I have noticed thus briefly, and I believe the disease has not hitherto been described by any of our Irish writers, nor has Simpson's operation for it been performed in Dublin, so far as I can learn, except in the following case, in recording which I beg it will be understood I make no claim as to novelty of observation or peculiarity of treatment.

On the 23rd June, 1866, I attended a young lady in her first labour. She had a very long and an unyielding perineum, and when the head came to press on it, there was very considerable delay, though the uterus acted strongly, and I feared there would be laceration, which, however, did not take place. The case was one in which I might now be inclined to adopt the practice suggested by Dr. Beatty in the paper he read before the Obstetrical Society, on rigid perineum, at the beginning of this Session. Convalescence took place without impediment, but when the lady began to move about, she found she suffered great pain in the coccyx. This pain corresponded exactly to the description given by Sir J. Simpson. It was greatest in sitting down and rising up, and it continued all the time she sat. Walking sometimes pained her, but she had no pain when lying or in defecation.

On several occasions I made most careful examinations of the part and surrounding organs. There was no disease to be detected in the uterus, or its appendages, nor did the rectum present anything abnormal. There was some thickening at the articulation of the coccyx with the sacrum, and pressure here caused great pain, more so than at any other part. I confined this lady to the sofa for sometime when she first complained, and gave iodide of potassium, and applied iodine over the part, but though this was continued as long as her general health would permit, she derived no benefit. I then allowed her to sit up and move about a little, making her use an air-cushion, but this gave no relief. She thought a firm cushion of a horse-shoe shape, and stuffed with hair, was better than the air-cushion, but neither this nor the local use of sedatives, nor tonics, and change of air, were of any real service. At length I determined to suggest the subcutaneous section of the muscles, being influenced to do so in a great degree, by hearing from Dr. Beatty, in the course of a conversation on the subject, that all the patients he had met having this disease, had died of phthisis, and I saw that my patient was daily losing strength and flesh from the constant pain she suffered. When I proposed it, she at once consented, and told me then, for the first time, that her mother, though she recovered ultimately, had suffered from the same disease for many years of her life, and was often obliged to kneel at table instead of sitting down.

On the 30th of March last, I proceeded to perform the operation, assisted by Mr. Maurice Collis. Having congealed the skin over the part with Richardson's apparatus, I introduced a narrow long-bladed tenotome at the point of the coccyx, and passed it on the flat, close to the right side of the bone, to above the part that I had found tender on pressure. I then turned the edge so as to cut from behind forwards, and, keeping close to the bone, divided all the tissues on that side. I now carried it round the apex, cutting all the fibres attached there, and, without taking out the knife, passed it up on the left side, and divided the tissues there in the same way as on the right. Only a few drops of blood escaped through the small aperture in the skin, and I applied a compress and bandage to limit the subcutaneous hæmorrhage, which was, notwithstanding, considerable, and was followed by inflammatory hardness and swelling, so that she could not sit, but even before this was gone, she found, greatly to her delight, that all the old pain had disappeared, and she has remained perfectly

free from it ever since, and has improved in strength and condition. I may mention, as showing her freedom from pain, that on the 16th of May, she drove for five hours on a common outside car through the County Wicklow, without any inconvenience.

P.S.—Since this paper was read at the Obstetrical Society, I have received a copy of a most valuable work, by Warren, of Boston, entitled "Surgical Observations, with Cases." The author has devoted a section to injuries of the coccyx, and details six cases illustrative of the severe and long-continued symptoms arising from injury to this bone. Mr. Warren believes these resemble most closely the acute pains which attend periosteal inflammation. "Scarcely an instance," he says, "can be said to have resulted in perfect recovery, and many of them have caused severe local symptoms for some months, and even years, afterwards." In the first case the injury was caused by a fall on the stairs, "the pain and inability to sit lasted more than a year, and the sensitiveness of it continued for ten years after the accident." In the second case, also caused by a fall on the stairs, there was some displacement of the bones, which was adjusted at the time; at the end of six or seven months the patient was able to walk a little about the room with support—"she did not recover from the immediate effects of the accident for one or two years, and now, at the end of eight years, is not able to ascend stairs without suffering." Another of the patients had the coccyx fractured and displaced some years before. "At the time, she was confined about five weeks with very severe symptoms, and never ceased to suffer in the part since." Remarking on these cases, Mr. Warren says Dr. Simpson has described the affection, "and in some obstinate cases, after having tried all remedies in vain, proposed, and practised with success, the girdling of the coccyx by sub-cutaneous section, just above the diseased part, so as to cut of all nervous communication with it." Mr. Warren does not seem to have performed any operation for the disease himself, and it will be seen from the foregoing he has not correctly apprehended Simpson's operation, or the objects proposed to be attained by it.

ON THE PRODUCTION OF ANÆSTHESIA BY THE VAPOUR OF ABSOLUTE ALCOHOL.

By HENRY MAC CORMAC, M.D.
CONSULTING PHYSICIAN TO THE BELFAST HOSPITAL.

THE many deaths which now lie at the door of chloroform, administered as an anæsthetic, loudly proclaim the deep importance of supplementing or even of entirely superseding it, if this be only possible, and otherwise proved to be desirable. It will be admitted, without dissent, that in the cases which suit it, the ether spray will be uniformly preferred. But there are cases which the ether spray does not suit, and in which, if we have no better resort, we must still have recourse to chloroform. But is there no better resort? Is there no other anæsthetic which will better suit the requirements of the case? There are the oxides of carbon. In Paris the protoxide of nitrogen has had its claims recently urged strongly. It is a very agreeable, and it is said to prove a safe anæsthetic. Dr. P. Smith speaks hopefully of the tetra-chloride of carbon. He has also tried it with promising results. Ether has many advocates. It is preferred in Lyons. But it is not exempt from risk; and, perhaps, if it had been resorted to as often as chloroform has been resorted to, it might prove just as fatal. Under these circumstances, I should wish to turn the attention of the Medical Profession to the possible use of the vapour of absolute alcohol. I am not aware that the vapour of alcohol has ever been resorted to as an anæsthetic, and yet, it seems to me to have very many claims to attention. In the first place, people are continually getting drunk, and though drunkenness kill a few, there is, I believe, no other known pathological condition from which so many persons are known to recover.

Alcohol produces its action more slowly than do most other anæsthetics, and therefore, and in so far, so much the more safely. It will act by inhalation, as well as when taken into the stomach. I have known repeated examples of intoxication produced in spirit stores by the inhalation of the fumes of alcohol, as when men have been engaged in transferring spirituous liquors from one cask to another. I propose, therefore, that the vapour of absolute alcohol, or at least alcohol of a certain strength, should be employed, as chloroform is employed, in order to induce anæsthesia. The trial were easily made, and the results, I would venture to anticipate, would be such as to encourage perseverance. Although one might hardly hope for final results, still, a scientific commission to report on the various possible anæsthetics, after due trial, could not but be productive of advantage. Meanwhile, I should wish here to cite a case of death from chloroform, which does not seem to have come under the notice of English medical men. It is reported in the *Weekly Globe*, Toronto, Upper Canada, 22nd March, 1867:—

"About twelve years ago, a man named John Gould (lately residing in the vicinity of Hamilton) was wounded in the fore and upper portion of the thigh by a jack-knife, which cut the femoral artery, causing much hæmorrhage, but, being of a strong constitution, the loss of blood affected him very slightly. A cure was effected in time, and he appeared to have attained his usual vigour. After the lapse of ten and a-half years, a small swelling appeared directly on the spot where he had been stabbed, which proved to be an aneurism. He was treated by several medical gentlemen in his vicinity, but without success. He came to Toronto, and put himself under the care of Dr. Beaumont, who procured his admission into the General Hospital on the 16th November last. The aneurism was so high up that the artery, instead of being tied, as is usually the case, in the leg, was to have been tied in the lower portion of the abdomen, necessitating a very delicate operation, and one of so much interest that the following gentlemen were present to witness its execution at the Hospital:—Drs. Newcombe, Thorburn, Lizars, Aikins, Wright, Hodder, Philbrick, Williams, King, Riddell, O'Dea, Rosebrugh, Henry Wright, D. D. Wright, Richardson, William Ogden, Winstanley, Constantinides, Rowell, Howson, the Military Surgeon of Toronto, Captain Stratford, Alderman Dickey, the House-Surgeon of the Hospital, Dr. Hampton, and others. About two hundred students were also present. About half-past one the patient was brought into the theatre and placed on the table. Previous to operating, the surgeon, Dr. Beaumont, gave a history of the case, stating that the operation was one not always successful, and which few had had the honour to perform—only one similar having taken place in Toronto. Having placed the patient in position, Dr. Henry Wright administered the chloroform. The patient, after inhaling for a short time, appeared to be sinking into a deep sleep, and, beyond a few vigorous struggles, showed no reason why the anæsthetic should be discontinued. Dr. Beaumont got his instruments in readiness, and was about to plunge his knife into the patient when the attention of the attendants was called to the congested state of his lips and face, which were of a purplish hue. Steps were immediately taken to resuscitate the patient—cold water was dashed in his face, ammonia applied to his nostrils, the electric battery to the nerves of the chest and neck, and finally he was rolled on the table after the manner of recovering drowned persons, but with no avail—the spirit had fled."

CASE OF RETAINED PLACENTA—HOUR-GLASS CONTRACTION, WITH MORBID ADHESION AND HÆMORRHAGE.

By H. M. JONES, M.D., M.Ch., L.R.C.S.E., Etc.
PHYSICIAN CORK CITY DISPENSARY, DEMONSTRATOR OF ANATOMY, QUEEN'S COLLEGE, CORK.

THE particulars of the following case may interest your readers, presenting to my mind some features that may attract the midwifery practitioner:—

Mrs. A——n consulted me, about the latter end of October, suffering then from a white discharge from the vagina and os uteri, which, on enquiry, I found succeeded a severe attack of syphilis, from which she was at this time recovering. On examination I detected some slight ulceration on the inside of vagina, and she told me that the husband suffered severely also from venereal disease. They both had undergone medical treatment, lately her catamenia had ceased, when suddenly a flow of blood came on which weakened her greatly for some time. She had not any discharges since this occurrence, about a month previously to consulting me, and suspecting that she might be pregnant, she came to me. The discharge and accompanying symptoms of pain disappeared under a mild mercurial course, local injections, and lotions. Since this she had been going on well, but soon afterwards told me she felt the movements of the child. I saw nothing of her afterwards until the 4th of May, when she called on me and said that she had two days previously again lost a good deal of blood suddenly, since which she had not felt the movements of the child as hitherto. I ordered her a castor oil draught, and enforced perfect quiet. On the 5th I was summoned to see her, and she was complaining of slight labour pains, which had lasted some hours. On making an examination I found the os quite undilated, and learned from her that there had been no discharge since that on the night of the 1st. At 12·30 P.M., the same night, I was again called on, and found my patient's pains had altered to very inefficient, short, but frequent bearing down pains, which having had no effect on the os, and her pulse having risen since my previous visit, I ordered her a mixture containing tartarized antimony and laudanum, the doses of which were to be frequently repeated (*i.e.*, every second hour) during the night. About 5 A.M. I was brought by the husband in a hurry, and when arrived the child (dead) was lying attached to the mother, who immediately after its expulsion had lost a considerable quantity of blood.

The child was quite putrid about the thorax, green and discoloured, being of a dark brownish hue, and mottled elsewhere, and so soft was it, that the nurse who had aided in its extraction, for it had come feet foremost into the world, and very rapidly, told me that she was certain it would have broken across during its exit, which idea on her part, considering its putrescent character, I was not astonished at. The child was delivered about half an hour, so having divided the cord and ligatured it, I turned my attention to the mother, who I found rather weak and very anxious. On placing my hand on the abdomen, I found, as I thought, the uterus pretty well contracted. On questioning the nurse, I discovered that she had endeavoured to remove the placenta, and had passed her hand up, but not being able to stir it by the cord, and not finding it she sent in haste for me. Making the funis a little tense, and using slight traction, I saw that it quickly returned into the vagina, when I allowed it, and that a general oozing of blood occurred immediately I did so. I applied cold to the abdomen outside, using pressure with my hand; having despatched a messenger to my house for some ergot. On again making the cord tense, and using some very slight traction high up on the cord, the feeling was conveyed to my hand, as if the placenta was partly loose, which idea was confirmed by a fresh gush of blood, which came on immediately after a severe labour pain. On consideration, I thought there might be some morbid adhesions retaining the placenta, and which, if not detached, dangerous hæmorrhage might ensue. I accordingly proceeded to pass up my hand, guided by the cord, and on getting it inside the os externum, slight hæmorrhage going on at the same time, a severe labour pain came on, which expelled the cord and portion of an extremely rotten and discoloured placenta. There was now no time to lose. The hæmorrhage became profuse, so I passed up my hand, which, though naturally a small one, I found great difficulty in getting through an extremely contracted uterus, of the true hour-glass variety.

My arm, which was first deluged with blood, acted for the time being as a plug, and partly allayed the hæmorrhage. When I got my hand into the superior cavity, I found high up attached to its summit the placenta, and adherent pretty firmly to the wall of the uterus. By a good deal of trouble, scraping from above down, I detached a loose mass, which I satisfied myself must be the greater portion of it. The difficulty now remained of getting it through the greatly contracted uterus, and by which my arm was firmly caught. However, slowly and with great caution, and, I confess, a certain degree of fear (for I felt the mass crumbling in my fingers), I drew it down, accompanied by a large clot; some slight hæmorrhage ensued, but nothing of any consequence. I was not satisfied with the appearance of the placenta that all had come away, so I again introduced the hand, and succeeded in detaching one or two moderately sized portions. I now gave my patient (as this last operation had rather weakened her, and caused great pain) an ounce of brandy, and, afraid that any might yet remain, I introduced my hand the third time, but could only succeed in bringing away a small bit of a membranous character. Hæmorrhage had now entirely ceased, so I got the binder well on and sent for a medical friend who lived adjacent. In meantime I gave her twenty-five drops of liq. ergotæ. On consultation we determined that, as the whole placenta appeared to have been brought away, it was not necessary to proceed further; and the patient, being now free from pain and no blood oozing, expressed a desire for sleep. I having given directions as regards her diet, left, desiring them to continue small doses of the antim. tart. mixture during the day. I found her that evening at six P.M. going on well; no bleeding; pulse 70; had slept well since morning; no headache, complained of slight pain over pubic region; discharge coming from vagina heavy and bloody; next day expressed herself much better; slight pain over pubis still. Ordered ℥i. ol. ricini, as bowels confined; discharge of lochia abundant, but foul smelling, and small bits of placenta coming away with it.

Tuesday evening.—Discharge continuing still bloody; pain over uterine region gone; pulse and secretions healthy.

At 12·30 P.M. she complained of intense pain, and appeared to suffer most excruciating torture over the abdomen, which rapidly assumed an alarming character. The lochia towards evening became less. I at once ordered strong turpentine fomentations, which freely reddened her, and three powders containing each:—

Hydrarg. submur, gr. iii.
P. ántim, gr. iii.
Morphiæ acet gr. ¼
Una secund ℔ hora sumend.

Wednesday.—At 8 A.M., she was nearly free from pain, and about three hours after the stuping passed a decomposing portion of membrane per vagina. I ordered a solution of permanganate of potash (three grains to eight ounces of water), to be injected three times a day into the vagina. This gave her great relief, having the effect of completely removing all fœtid odour from the discharge, producing a beneficial and permanent effect; she continued these injections until May 13th; she is now perfectly well and up. The very rapid expulsion of the child, and the fruitless attempts of the nurse to get the placenta away must have induced the peculiar contraction referred to. The difficult question I especially felt in this instance was the propriety of introducing my hand! When, having made tense the funis, I saw the hæmorrhage, the semi-attached feel conveyed to my hand, the discharge of blood, the history of the case, determined me not to wait the usual limited time! for I was convinced that I had to deal with a morbidly adherent placenta partly detached. As one young in midwifery practice I may be excused for bringing these details forward; yet, I trust that those more experienced in such cases will bear this fact in mind while perusing them.

The effect of the permanganate of potash in this instance verifies the reputation it has as a powerful deodorizer and

antiseptic, and I can recommend its use as most beneficial in all similar cases.

Hospital Reports.

ST. BARTHOLOMEW'S HOSPITAL.

CASES OF STRANGULATED HERNIA, WITH GANGRENE OF THE INTESTINE.

Under the care of Mr. THOMAS SMITH, F.R.C.S.

Femoral Hernia—Strangulation four days.

Case 1.—A male, æt. 45, was admitted into St. Bartholomew's Hospital September 25, 1865, under Mr. T. Smith's care. The patient has had a rupture nine years, has never worn a truss, and no attempt has ever been made to return the bowel, which has all that time been protruded. Symptoms of strangulation have existed four days ; there has been no action of the bowels during that time, and vomiting has occurred at frequent intervals durthe last three days.

There was a small, tense, and tender swelling in the right groin ; the abdomen was slightly tender on pressure; pulse under 80 ; the warm bath and taxis under chloroform had been employed before his admission, Mr. Smith therefore at once proceeded to operate.

Gimbernat's ligament was divided external to the sac without effect ; the sac was therefore opened, and was found to be adherent to the bowel by recently effused lymph.

The small knuckles of intestine within the sac was quite gangrenous.

The intestine being drawn down about an inch, its healthy portion was attached by two silver sutures to the margins of the wound in the skin, and a poultice was applied.

The patient progressed uninterruptedly well after the operation, all his motions passing by the wound; the only difficulty that occurred in the management of the case was that, from the opening in the intestines being high up in the canal the patient suffered somewhat from deficient nourishment. From the first he was fed with one or two nutrient enemata daily in addition to his other food.

Two months after his admission this man was discharged at his own request, a very small opening remaining at the site of the operation ; this opening gave him little trouble, and was at the time of his discharge rapidly closing. He wears a truss with an ivory plug.

In this case the ordinary rule of practice in cases of gangrenous intestine was departed from—that is, instead of dividing the stricture, laying open the gangrenous part, and allowing the gut to remain *in situ*, the common plan of procedure, the intestine was pulled down a very short distance, and fastened by suture to the external wound; an additional, and perhaps unnecessary, precaution adopted to prevent the escape of fæces into the abdominal cavity. It is worth while observing that this attachment of the bowel to the external wound by sutures did not seem in any way to retard the process of spontaneous cure of the artificial anus—since, at the end of two months, the unnatural orifice had all but closed ; indeed, another week's rest in bed would almost certainly have completed the cure.

Inguinal Hernia—Strangulation one week.

Case 2.—March 4th, 1866, a man æt. 65, was admitted under Mr. T. Smith's care, suffering from strangulated inguinal hernia. The hernia has existed for fourteen years, and a truss has generally been worn ; symptoms of strangulation have lasted one week, and vomiting for the last six days. The patient being in a state of collapse the operation was at once proceeded with. The sac was opened before any attempt was made to return the bowel. The intestine, just below the external ring, was quite healthy in appearance, and no constriction existed at the ring ; there were no adhesions to the sac or margins of the ring. On turning the intestines out of the tunica vaginalis (the hernia was congenital) about three inches of the lowest part was found to be grangrenous. The healthy portion of the gut was returned, sutures were passed between the bowel and external wound, and the mortified parts were freely laid open. The patient was moribund at the time of the operation, and died four hours afterwards. Apparently the originally strangulated intestine after becoming gangrenous had slipped down into the bottom of the sac, drawing with it a fresh protrusion. The relaxation of the stricture might have taken place in consequence of the occurrence of gangrene in the bowel, and coincidently with the symptoms of general constitutional depression.

Inguinal Hernia—Strangulation three days.

Case 3.—A man aged 60, was admitted into St. Bartholomew's December 18, 1866, under Mr. T. Smith's care. The patient was apparently deranged in his mind, and was reported to have been in this condition for two years. He had had a rupture for some years, and had never worn a truss. The hernia was generally down, but was reducible at will. The bowels had not been moved for three days before admission, and during the last forty-eight hours vomiting had been frequent.

There was a large scrotal hernia, very tense and tender to the touch ; the integuments over the lower part of the swelling were œdematous ; about the neck of the hernia there appeared to be but little constriction. Taxis in the warm bath and under chloroform failing to give any relief, an operation was performed.

The external abdominal ring was examined, and from its lax condition it was evident that the obstacle to the return of the intestine lay elsewhere. The sac was then opened at its neck, and the contained intestine was found in a natural state. By tracing the intestine downwards into the scrotum the very narrow and thickened neck of an old sac was reached, within which was enclosed a considerable quantity of the small intestines, fully four inches of which was completely gangrenous. The neck of this sac was freely divided, and it then became apparent that the hernia was congenital. The intestine was returned, except the portion that was gangrenous ; it was attached by silver sutures to the margin of the wound, and the mortified part was freely laid open. Next day the pulse was 84; the tongue was clean and moist; skin cool. There was a free escape of fæces from the wound, and in every respect the patient was doing well. From the character of the discharge from the bowels it was evident that small intestines had been laid open high up. It was found necessary to thicken all food with arrowroot to delay somewhat its escape from the artificial anus. Nutrient enemata were administered twice daily.

The patient, except for an attack of bronchitis on the third day, went on uninterruptedly well, and at the end of a week the gangrenous portion of the intestines had separated, and the wound was granulating. A day or two later the patient began to shew signs of severe constitutional disturbance, and an abscess began to form in the right iliac fossa, with a tendency to spread upwards and outwards beneath the abdominal muscles. This was opened, and a large quantity of pus, mixed with air, escaped. Three days afterwards the patient died from exhaustion.

In this case the old hernia sac had been displaced, and thrust downwards into the scrotum by a recent protrusion of intestine—a condition which rendered it almost impossible to reduce the protrusion by simple taxis, since, in the taxis, the surgeon's efforts are directed to return the bowel through the abdominal ring, whereas, in this variety of hernia, the constriction lies low down in the scrotum, at the neck of the displaced sac.

Femoral Hernia—Strangulation seven days.

Case 4.—A woman, æt. 50, was admitted into St. Bartholomew's Hospital, Feb. 9, 1867, under Mr. T. Smith's care.

She had suffered from hernia for many years, and had never worn a truss; the hernia was generally reducible. It has now been irreducible for a week, and during the whole of this time she has suffered from constipation, and from vomiting at intervals. She has had no medical advice but has taken, during the week, three doses of castor oil without any effect on her bowels.

She looks very exhausted, and complains of feeling faint; tongue dry and brown; pulse very feeble and frequent. The belly is soft and not tender on pressure; there is almost constant vomiting. In the left groin is a small femoral hernia, slightly tender on pressure, and not at all tense.

The ordinary operation was performed under chloroform. The sac was opened; it contained a small knuckle of intestine, showing but little signs of vascular congestion, but being apparently tightly constructed at the femoral ring. The stricture was divided, and the intestine returned, and attention was turned to a small piece of omentum, which was protruded with the hernia, and was adherent to the outer margin of the femoral ring. This being cut off, it was observed that fœcal matter was welling up from the wound in large quantities. The intestine was, therefore, again drawn down through the ring, and examined. A ragged, ulcerated opening, the size of a sixpence, was found in the bowel, just at the neck of the protrusion, and opposite to Gimbernat's ligament. The bowel was drawn further down, and was attached to the margins of the wound. The patient died four hours afterwards with all the signs of acute peritonitis, and after death fæces were found in the peritoneal cavity.

It is more than probable that, in the foregoing case, the sloughing of an isolated patch of the intestine, opposite the seat of stricture, had relieved the severity of the stricture, and had allowed the protruded part to recover itself. This would account for the healthy appearance of that part of the bowel seen on opening the sac. The ulcerated opening in the bowel must have been adherent to the inner margin of the femoral ring, since no escape of fæces occurred until the bowel was detached from its connections by being returned into the abdominal cavity. The more prudent course would have been to have first drawn down the bowel, after dividing the stricture, to see if it were in a fit state to be returned into the peritoneal cavity. Mr. Smith was deceived by the healthy appearance of that part of the bowel that came into view on opening the sac; and thus he omitted to inspect the condition of the intestine where it was girt by the margin of Gimbernat's ligament.

ON DISEASES OF JOINTS.

By HOLMES COOTE.

SURGEON TO ST. BARTHOLOMEW'S HOSPITAL.

The Annual Statistical Reports published by the authorities of St. Bartholomew's Hospital, afford many subjects for interesting inquiry and reflection. No subject, perhaps, is of greater importance than that of disease involving the articulations. The number of cases admitted is always large. During the past year there have been 60 cases of *synovitis*, and no deaths; and 78 cases of *diseased joints*, with a death-rate of 6·41; the total of all cases under treatment being 138.

The knee-joint has been excised six times—three patients between the ages of 5 and 10, the other three between the ages of 10 and 20. Of these, three died—the first, aged 5, of pyæmia, on the 18th day; the second, aged 20-30, of pyæmia, on the 22nd day; the third is reported in one column "unrelieved," and in another is included among the fatal cases—the result, as far as I am concerned, being the same.

In remarking on this very unfavourable aspect of the operation of resection of the knee-joint, I would observe that in all cases it was performed at an age most favourable for convalescence and recovery—namely, between infancy and early adult life.

It cannot be said that diseases of joints are commonly fatal; on the contrary, the death-rate is very low. Nor can it be urged that amputations are commonly necessary. During the past year, there has been no amputations at the hip-joint. There have been four amputations of the thigh for disease of all kinds in males, one in females, making a total of five; of these, one male, an adult, died of diffuse cellulitis. The leg was amputated on three occasions. Of these cases, two died. The ankle and foot, each once; recovery in both instances. No amputation was performed in the upper extremity during the same period.

Much of this favourable return is due to the great degree of patience in carrying out surgical treatment; to a greater command of valuable surgical appliances and apparatus, and to the yearly increasing improvements in ventilation, in diet, and in general domestic arrangement, for which this hospital is celebrated.

MEATH HOSPITAL AND COUNTY DUBLIN INFIRMARY.

SURGICAL RECORDS.

By WILLIAM STOKES, Jun.

SURGEON TO THE HOSPITAL, LECTURER ON SURGERY, CARMICHAEL SCHOOL.

STRUMOUS DISEASE OF THE ANKLE-JOINT OF EIGHT YEARS STANDING—EXCISION OF THE ANKLE-JOINT.—AFTER TREATMENT BY THE CONTINUAL BATH—CASE PROGRESSING FAVOURABLY.

In the domain of operative surgery there are few procedures which have so many warm supporters, or such bitter adversaries as resections of the larger joints. This difference of opinion among surgeons in regard to the value of these operations is due to many circumstances, among which may be mentioned the frequent occurrence of unsatisfactory results, and the unlimited faith which so many surgeons have in the value of rest in the treatment of all forms of articular disease. No one could be more convinced of the value of rest than I am, but I cannot but think, that the surgeon who relies solely on this in the treatment of many forms of articular disease, rejecting all idea of operative interference until the vital powers of the patient become so seriously impaired as to render success in operating highly problematical, fails in duty to his patient and to the cause of true conservative surgery. It is, doubtless, this tendency among surgeons to make operative interference the *dernier ressort*, that has been so often the cause of want of success in these procedures, and brought them consequently into an ill-deserved disrepute.

To the excision of the ankle-joint a special class of objections have been urged, based, first, on the mechanical difficulty of the operation, and, secondly, on the difficulty, and according to some, on the impossibility of determining, even approximatively, the amount of disease that may have to be removed. With regard to the first of these, it is unnecessary to dwell, for no mechanical difficulty should ever deter the surgeon from performing an operation that may be of ultimate advantage to the patient, and with regard to the second, it appears to me, that the best answer to give is that if the amount of disease be found so extensive as not to justify resection, there is then nothing to deter the surgeon from amputating at the ankle-joint, after the manner recommended by Professor Syme or Pirogoff.

In the present communication, I shall not enter into any of the historical details of this procedure, but proceed at once to relate with all possible brevity, the leading particulars of the case in which the operation was performed for the first time in Ireland.

J. M'Graith, æt. 27, a boot-maker by trade, was admitted into the Meath Hospital, under my care, on the 10th of last April. He stated that about eight years previously he received the kick of a horse over the inner malleolus. The joint swelled after this, and was extremely painful. This seems to have subsided under suitable antiphlogistic measures. The swelling, however, never entirely

disappeared. After some time abscesses and sinuses formed, which never healed, and from which purulent matter, varying as well in consistence, as in quantity, continually oozed up to the time of his admission into hospital. In other respects, the patient was in good health, though, as might be expected, much debilitated by the long confinement and the continuous discharge from the sinuses. On probing these, I found that the direction of all was towards the astragalus, a circumstance which went far in making me come to the conclusion that the disease was probably limited in extent, and possibly localised in the astragalus and articulating surface of the tibia. Having formed this opinion, I deemed the case a fitting one for excision, and I proposed it to the patient, who gladly acceded, and, my colleagues concurring in the propriety of the operation, I performed it on the morning of the 29th of April, in the following manner :—

A long vertical incision was made along the posterior edge of the fibula, and then brought obliquely forwards and inwards towards the internal cuneiform bone. A somewhat triangular-shaped flap was then dissected backwards, a step in the operation which was attended with much difficulty, owing to great matting and thickening of the soft parts. This having been done, the next step was to excise the end of the fibula. This was effected with great difficulty, owing to the fibula being firmly anchylosed below with the tibia. The outer portion of the extremity of the fibula was found softened and diseased. A chain saw was then passed round the fibula about two inches and a-half above its extremity, and divided. Owing, however, to the firm anchylosis below, it could not be removed until a section was made separating it from the tibia by one of Langenbeck's small resection saws. This having been done, the excised portion of the fibula, with a small portion of the outer edge of the tibia, to which it was attached, was easily removed. It then was obvious that not only the extremity of the tibia, but also the astragalus, were extensively diseased. The greater portion of the latter was removed, chiefly by the straight and rectangular gouges. As we saw then that the inner malleolus was extensively engaged, we deemed it advisable to attempt the dislocation of the tibia outwards through the wound. Mr. Porter, whose assistance at this and every stage of the operation was invaluable, made the attempt to dislocate the extremity of the tibia through the wound. It was found impossible. More of the diseased structures were then removed, sometimes by the gouges, Langenbeck's and Hey's resection saws, and also by an ingeniously-constructed American forceps, of great power, which was kindly lent to me by my friend Dr. E. O'Grady. A second, and then a third attempt was made, to bring the extremity of the tibia through the wound. The last attempt proved successful, and our efforts were well rewarded, for it was plain that had we trusted to the instruments we had previously been using, we never could have removed all the disease we found situated in and about the inner malleolus. There was no necessity found for removing the periosteum by any of the raspatoria for the purpose, for it was found detached and thickened, lying loosely on the surface of the bone. A slice of the tibia, about a quarter of an inch in thickness, was then removed by an ordinary amputation saw, and the resection was then complete. One vessel only had to be secured, which I did by acupressure, adopting the method of "half rotation," or first variety of the fifth or Aberdeen method. Nothing could have been more entirely satisfactory than the way the hæmorrhage was arrested by this procedure. A piece of dry lint was then placed in the wound, and the edges brought together by five or six points of silver wire suture. A gypsom bandage was then applied from the toes to the junction of the upper with the middle third of the leg, in the manner I have already described, in the *Dublin Quarterly Journal* for May, 1865, the particulars of which I need not therefore now enter into. The patient was then placed in bed with the limb slightly elevated, and ordered forty drops of Battley's sedative, in a little sherry.

8 P.M.—Pulse 136 ; suffered from considerable abdominal pain during the day ; no sleep as yet ; no pain in ankle. Ordered a draught with sol. mur. morphiæ, gtt. xxxv., in an ounce of cinnamon water.

April 30, second day, 10 A.M.—Had a restless night ; pulse 140 ; had several attacks of retching during the night ; ordered iced beef-tea and champagne to be taken in small quantities every second hour ; also, the following draught to be taken at once :—

℞ Liq. mur. morphiæ, gtt. xxxv.
Spt. chloroformi.
Tinct. cort. aurant., aa ℥ss.
Aquæ lauro cerasi, gtt. xx.
Aquæ, ℥vii.
Fiat haustus. ss.

4 P.M.—Found the patient much quieter, but pulse is still 140. I cut a large oval shaped window in the gypsom bandage over the situation of the wound, and then applied, with a large camel's hair brush over the bandage, a solution of Dammar resin in sulphuric ether, to prevent the action of the water in the continual bath from softening the gypsom. The limb was then placed in the bath, being supported in it by a coarse net. This gave the patient great relief, the pulse fell almost instantaneously to 120.

May 1, 9 A.M.—Had a quiet night ; pulse 120, full and strong ; no pain in ankle ; had several hours sleep.

3.—Pulse 100 ; skin cool ; tongue moist. Free suppuration from the wound ; appetite good.

On May 14, I took the limb out of the bath, removed the gypsom bandage, and placed the limb in a box splint. The wound was then dressed with Dr. Richardson's styptic colloid, which I continued to use for upwards of a fortnight. I have had much reason to be satisfied with it, not only in this but in some other cases in which I have employed it. On May 29, the wound being nearly healed, I took the limb out of the box, since which date the case has gone on steadily improving. The only *contre temps* of late has been the formation of some small abscesses in the vicinity of the wound, the discharge, however, from them is steadily diminishing, and I have every reason to believe that the case will be brought to a successful termination.

I shall not, on the present occasion, discuss the various modes which have been suggested and practised by surgeons for performing the operation of excision of the ankle-joint. The method which I adopted differs from those recommended originally by Moreau, and subsequently by Professors Hancock, Langenbeck, and others.

In the operation, as I performed it, there is only necessity for a single external incision. The advantages of this are, in the first place, that the suppurating surfaces are necessarily less in extent, and consequently the chances of rapidity of healing are increased. In the next place, the operator avoids injuring the extensor tendons of the foot. Thirdly, any injury to the tendon of the tibialis portions is avoided ; and lastly, no risk whatever is run of wounding either the anterior or posterior tibial arteries.

With regard to periosteal preservation, as I have frequently directed attention to the importance of preserving with all care that membrane, in the great majority of operations that have for their object the removal of diseased bone, I shall not, on the present occasion, dwell on this important modification of excision of the ankle-joint, as first practised for the removal of diseased bone by the elder Moreau, in the year 1791.

CONVALESCENT HOSPITAL.—The Liverpool Committee for obtaining subscriptions for the relief of the sufferers by the cotton famine, finding they have a balance in hand of £40,679, 5s. 1d., propose to devote this sum to the building of a Convalescent Hospital, in a healthy position near the town, to act as a supplement to the existing infirmaries and hospitals. The proposal has met with general approval, and a committee has been appointed to carry it out, consisting of, amongst others, the chairman and treasurer of each of the principal Hospitals in Liverpool.

Summary of Science, &c.

(Specially Edited and Compiled for the Medical Press and Circular.)

By CHARLES R. C. TICHBORNE, F.C.S.L., F.R.G.S.I., &c.

[THE Editor of this Summary wishes it to be understood that he is not responsible for the ideas, theories, or the correctness of statements made in any of the papers quoted in the compilation.]

CANTHARIDIN.

PROF. DRAGENDORFF states that he has found the cantharides fly to contain a volatile body which acts on the organism in a similar manner to cantharidin. Freshly-powdered cantharides are moistened with water and distilled. The portion going over, below, and at 100° C., and which has an acid reaction, contains the new body. We are of opinion that Prof. Dragendorff's substance is simply cantharidin carried over in some volatile product in which it is soluble. The quantity of cantharidin that will act as a vesicant is very minute, and is easily distilled in the presence of many fluids (*e.g.* acetic acid).

ON THE MINERAL ELEMENTS OF CANTHARIDES.

Cantharides containing 8·18 per cent. of moisture give 5·79 per cent. of ash. Exhausted by boiling water, they left a residue which amounted to 68·29 per cent., which gives 1·62 per cent of ash.

The aqueous decoction treated by its weight of alcohol gives a residue reaching 3·90 for 100 of ash.

The filtered liquor gives 19·63 per cent. of solid substance, and 2·71 per cent. of ash.

The following table represents the analyses of the ashes:

	Ash insoluble in Water.	Ash soluble in Water and Alcohol.	Ash soluble in Water.
Lime ...	0·436	0·311	0.340
Magnesia ...	0·125	0.237	0·191
Potash ...	0·048	0·675	0·136
Soda ...	—	0·122	0·040
Phosphoric Acid ...	0·303	1·237	0·577
Sulphuric Acid ...	0·0523	0·004	—
Carbonic Acid ...	0·030	—	—
Silicic Acid ...	0·600	0·027	—
Chlorine ...	—	0·03	—

—*M. Kubly (Journal de Pharmacie et de Chimie), April*, 1867.

CEMENT THAT WILL RESIST FIRE AND WATER.

We have no doubt that the following receipt, which appeared in *Cosmos*, 8 *Mai*, will be found useful, particularly in large laboratories, where good cements are invaluable. Dr. Junesmann uses the following mixture. "It will be found very useful, particularly in the distillation of fatty matters, and volatile oils, for soap makers' boilers, air pumps, and all kinds of steam or vapour joints."

He takes two parts of iron filings, quite free from oxide, and passes it through a fine sieve. He mixes this with one part of potters' clay, which must be perfectly dry and finely powdered. The whole is then worked up with strong vinegar, until it is quite plastic. The cement must be used at once, as it hardens rapidly.

CARMINIC ACID.

H. Hlasiwetz and A. Grabowski, state that when Carmine is boiled with diluted sulphuric acid, it splits into carmine red, and sugar. The latter reduces Trommer's solution, and gives Pettenkofer's reaction, but neither ferments or acts on polarized light ; Traces of it are dissolved by alcohol. Dried at 50° its formula is C^6 H^{10} 0^5 at 100°, C^6 H^8 0^4.

Carmine red, C^{11} H^{12} 0^7, is a dark purple amorphous substance, reflecting green light, soluble in water and alcohol, with a fine red colour, and insoluble in ether. Fused with a potash solution of appropriate strength, carmine red gives oxalic and succinic acids, and coccinin, probably C^{14} H^{12} 0^5—a body resembling chinon. Its crystals polarise light, are insoluble in water, easily soluble in alcohol, difficulty so in ether. Coccinin dissolves very easily in dilute alkaline solutions, and in such solution is one of the most sensitive bodies to the action of oxygen. The solution is at first yellow, then violet, finally, a magnificent purple red. Few bodies give rise to so many phenomena of colour as coccinin. From the splitting of carminic acid into carmine red and sugar, perhaps Schutzenberger's is the nearest to the real formula of that much investigated body, viz., C^{17} H^{18} 0^{19}.

IODIDE OF SILVER.

From the French of H. Deville.

Hydriodic acid, especially when concentrated and slightly warmed, dissolves silver rapidly with evolution of hydrogen, forming crystallizable hydro-argentic iodide Ag. I,H,I, and on placing the solution of this acid salt, in contact with silver-foil, or on leaving it exposed to the air, whereby the hydriodic acid is gradually oxidised, argentic iodide (Ag. I.), is easily obtained in large beautiful crystals, having the same form as the native iodide, viz., according to Des. Cloizeau, a regular hexagonal prism, with six-sided summits, cleaving very distinctly parallel to the base. Argentic iodide may also be produced by pouring strong hydriodic acid upon chloride of silver, which is immediately decomposed with a hissing noise, like that produced in the slaking of lime. The iodide of silver thus obtained may be dissolved in an excess of hydriodic acid, and converted into the crystallised salt as before.

NICOTINE.

Dr. C. Huber, says that when treated with chromic acid nicotine gives an acid C^6 H^5 NO^2 yielding easily crystallisable salts and azo compounds. Distillation with lime produces C^5 H^5 N., an oily base soluble in water. The first reaction also produces another acid richer in carbon, and at least one base.

The Journal of the Chemical Society contains an important communication from Dr. Stenhouse, *on some varieties of Orchella Weed*. The same number contains "Graham on the Absorption and Dialytic Separation of Gases by Colloid Septa," which, however, originally appeared in the "Transactions of the Royal Society."

"Proceedings of the Royal Society" contain the following papers, which will be found to possess more than ordinary interest:

Researches on Gun Cotton. F. Abel.

Observations of Temperature during two Eclipses of the Sun (in 1858 *and* 1867). By John Phillips, M.A., &c.

A New Fact relating to Binocular Vision. By A. Claudet.

Mr. H. Sorby communicates a paper on a *Definite Method of Qualitation Analysis of Animal and Vegetable Colouring Matters by means of the Spectrum Microscope.*

The author describes his apparatus, which is now well known. It is made so that it can be attached to an ordinary binocular microscope with an inch object glass. The scale of measurement is taken from an interference-spectrum produced by two small Nicol's prisms and an intermediate plate of quartz. This produces twelve bands, which gradually increase towards the blue or more refrangible end of the spectrum. The author then proceeds to describe a system of notation in which the common types are used. As this spectral shorthand is not likely to come into use, it is not necessary to enter into its details. Mr. Sorby has endeavoured to institute a regular system of analysis applicable to those substances which give absorption-spectra. This is regularly worked out by the action of re-agents and solvents, and will be read with great interest by those engaged in spectral investigations.

Dr. Maxwell Simpson informs us that he has succeeded in forming *Di-iodacetone.* This substance is the iodine compound corresponding to a body discovered many years ago by Sir Robert Kane, and called by him mesitchloral. It is more generally known as di-chloracetone.

"The Laboratory" for 18th May contains an elaborate

paper on *The Higher Homologues of Chinoline*, by C. Grenville Williams.

F. Wöhler contributes a note to the *Chemical News* (May 24), on the *Direct Estimation of Boracic Acid.*

Pharmaceutists interested in *aloes* will find a well-written monograph upon that drug, and its varieties. The author is M. Marais (*Vide Journal de Pharmacie et de Chimie. Mai*).

CULTIVATION OF JALAP.

Mr. Daniel Hanbury is of opinion that jalap-root could be cultivated to advantage in Cornwall, Devonshire, and the Isle of Wight, and that it will thrive as a garden-plant during the whole year. In Madeira it would probably also succeed, if planted in situations sufficiently elevated.

THE FUNCTION OF BARREN STAMENS.

The use of the long staminodes, as found in *Dombeya angulata*, says Dr. Maxwell Masters, is to convey pollen from the short fertile stamens to the stigma, which, but for their intervention, could not be influenced by it. It is probable that barren stamens in similar cases play a similar rôle.

PHARMACY.

ADULTERATIONS IN THE DRUG TRADE.

Bael.—Professor Bentley notices, in the last number of the *Pharmaceutical Journal*, the substitution of mangosteen (*Garcinia mangostana*) for Bael (*Ægle marmelos*). The mangosteen rind may be distinguished by its much greater thickness, darker colour, the entire absence of adhering pulp, and seeds, and in the presence of some of the pieces of projecting, radiating, dark-coloured, "wedge-shaped stigmas."

Hydrargyrum ammoniatum B. P. has been found to be adulterated with white lead, chalk, carbonate of baryta, &c. One sample consisted of 89·18 per cent. of white lead, and 10·82 of corrosive sublimate.

Sp. Œther nitrosi was largely adulterated with water.

OXYGEN EMPLOYED THERAPEUTICALLY.

M. Limosin, pharmacien, writes to the following effect, in a memoir which he publishes in the *Journal de Pharmacie* (Mai). The author determined the relative quantity of carbonic acid extracted during the respiration of atmospheric air, and the inhalation of oxygen. A glass balloon was used, holding twenty litres of atmospheric air; the contents of this were inhaled, and each expiration was passed through a solution of caustic baryta, and by this method the amount of carbonic acid exhaled was weighed as carbonate of barium. Twenty litres (about four and a-half gallons) of air gave 2·58 grammes of carbonate of barium.

Twenty litres of oxygen respired gave six grammes of carbonate of barium under similar circumstances—or double the quantity.

From his experiments, it appears to the author that the following conclusions may be allowed—that the quantity of carbonic acid produced during the inhalation of a limited dose of pure oxygen is not such as to threaten too energetic an action, but which, however, is sufficient to produce a marked therapeutic effect.

In his researches "on the oxidation of blood," M. Claud Bernard has shown that the blood of animals whilst fasting absorbs more oxygen than during the time of digestion. It is fair, then, to draw this conclusion—that oxygen, to act properly, should be administered whilst fasting. The property which it possesses of exciting the appetite—which property has been noticed by Dr. Demarquay, and confirmed by a great number of physicians, justifies this method of administration.

The learned physiologist of the French college attributes the greatest resistance to the absorption of oxygen during the act of digestion, to the superabundant quantity of sugar thrown out at this moment by the force of the circulating torrent. At the same he states that certain agents, on the contrary, increase and facilitate this oxidation. Alkaline substances (chloride of sodium for example) act in this sense.

ON THE SEPARATION OF THE OPIUM ALKALOIDS.

M. Kulby, says the *Chemical News*, recommends the following process :—The substance to be examined is extracted with benzol, narcotine, papaverine, thebaine, and codeine, are dissolved. Amylic alcohol dissolves morphine from the residue, and alcohol will extract narceine, if present, in what is left undissolved by the two former solvents.

To separate the four alkaloids, soluble in benzol, cold amylic alcohol is used, which dissolves codeine; very diluted acetic acid will then extract papaverine and thebaine from the narcotine which remains. Finally, thebaine is precipitated from the sulphuric acid solution of papaverine and thebaine, by iodide of bismuth dissolved in iodide of potassium, papaverine remaining in solution.

The *Moniteur Universel* of the 18th January, publishes a decree which divides manufactories into three classes. This decree is published in connection with a report presented to the Emperor of the French, by M. Behic, Minister of Agriculture, of Commerce, and of Public works :—

"La division en trois classes des établissements reputés insalubres, dangereux ou incommodes aura lieu conformement au tableau annéxe au présent décret. Elle servira de règle toutes les fois qu'il sera question de prononcer sur les demandes en formation de ces établissements."—Palais des Tuileries, 31st Dec., 1866.

As this article states, the list is divided into three classes, which three classes include almost every conceivable chemical manufactory, either from their supposed deleterious nature, or from the combustibility of the products used. We may even go further, and state that every industrial pursuit is included in the three classes, many of the substances appear in two, or all the three divisions, *e.g.*:

"*Première Clâsse.*—Oxalic acid (making of the) by nitric acid, without the destruction of the noxious gas vapour.

"*Seconde Clâsse.*—Oxalic acid (making of the) by sawdust and potash vapour.

"*Troisième Clâsse.*—Oxalic acid (making of the) by nitric acid, with destruction of the noxious gas—accidental vapour."

Thus we are to infer that preference is given to the nitric acid process (although that is the most dangerous), providing that due precautions are taken to prevent the escape of the gas. The list is very long. The above is only given as a specimen.

Reviews.

IRELAND BEFORE THE UNION. With Revelations from the Unpublished Diary of Lord Clonmel. A Sequel to the "Sham Squire." By W. J. Fitzpatrick, J.P. Dublin: W. B. Kelly. 8vo., pp. 244.

Mr. Fitzpatrick's literary researches into the history of the latter part of the last, and the earlier portion of the present centuries, have thrown upon the occurrences of that, for Ireland, most eventful period, a light under which its condition at the time does not appear from a very creditable point of view. Unfortunately Mr. Fitzpatrick is too searching in his enquiries, and too explicit in his authorities to leave any room for escape from the unpleasant conviction that the Government of Ireland before the Union was corrupt and foul to an extent which would be hardly credited in these days of gushing philanthropy and political vestalism. This last effort of Mr. Fitzpatrick is not below any of his previous works in interest, and we anticipate for it a success commensurate with that of the "Sham Squire," the reading of which has made the buying of this work an absolute necessity. It is not within our province to enter on the general subject matter of the book, and if we have a sentiment on its contents, it is to congratulate our readers on having left the enjoyment of the half-century chronicled by Mr. Fitzpatrick to their grandfathers.

If the rebels were only a tenth-part as great scoundrels as a few of the royalists seem to have been, Ireland must have been simply a social and political pandemonium. Our Profession is represented in Mr. Fitzpatrick's pages by Dr. Christopher Teeling, the physician who attended the Sham Squire, and is named executor under his will. Respecting him the author says:—

"Old physicians describe Dr. Teeling as a man who although he never attained a high rank in his profession, was much respected for his worth and honourable feeling. It was, no doubt, in this conviction that the Sham Squire appointed him his executor; and, perhaps, we find in the character of Teeling thus given the reason why he declined to act. Dr. Teeling lived in Exchequer-street; he is described as a gouty old gentleman, with a strong determination of blood to the nose, indicative of indulgence in convivial pleasure.

"This tradition is confirmed by a verse from one of Dr. Brennan's poetic reviews of the Dublin Doctors, printed in the rare *Milesian Magazine* for July, 1812, which fell under our notice while correcting the proofs of the present page.

"T. was T——g now careless how this world goes,
Whose fancy had fire that is now in his nose,
Who floats on the great sea of physic a log
Deep sunk by its storage of port and of grog,
When a boy well employed at the mortar and pestal,
When a man hired to doctor the Sham and his vestal,
Pretending to honour and duty and high sense,
Yet plumed in the feather swore against license."

In the "Sham Squire," Mr. Fitzpatrick records that Mr. Dease, the well-known surgeon, being suspected, with good reason, of treasonous complicity, committed suicide to avoid disgrace and punishment. To this statement, Dr. M'Keever, in a letter to the author, takes exception, replies:—

"You mention that Mr. Dease was implicated in the abortive political movement of the day, but lacking the moral energy of his friend and associate, Lawless, who succeeded in escaping he retired to his study on hearing that a warrant was out for his arrest, and like Cato, died by his own hand. Now for a plain unvarnished statement of facts. Mr. Dease was one of the medical attendants on the Westmoreland Lock Hospital, and while paying his usual round of morning visits, his attention was directed by the resident apothecary to a man (at that period both sexes were admitted) with a considerable swelling in the groin. Mr. Dease having unfortunately for himself, as well as society at large, taken a hurried superficial view of the case, conceiving it to be one of ordinary abscess, dipped a lancet into it. A torrent of bright arterial blood gushed forth, and in a few moments life was extinct. Instead of an ordinary abscess, it proved to be an aneurism of the great femoral trunk that supplies the lower extremity. Poor Dease, humbled and confused at the egregious error he had so inadvertently committed, retired with an agonized lacerated heart to his study, and, as you correctly state, committed suicide."

In the absence of any proof, we may say that Mr. Fitzpatrick's story is that traditionally current, and has more of the blush of truth than the other version.

To all Irishmen, and to many others who are interested in "the Irish question," and in knowing whether any good reason has existed for the chronic disaffection of England's sister, the book is full of interest, and will be widely read.

THE SPAS OF BELGIUM, GERMANY, SWITZERLAND, FRANCE, AND ITALY: a Handbook of the Principal Watering Places on the Continent. Descriptive of their Nature and Uses in the Treatment of Chronic Diseases, especially Gout, Rheumatism, and Dyspepsia; with Notices of Spa Life and Incidents in Travel. By THOMAS MORE MADDEN, M.R.I.A., Licentiate of the King and Queen's College of Physicians in Ireland, &c. London. 8vo. 1867.

DR. MADDEN is so well-known to our readers that we need do little more than introduce this, his latest work, to their notice; observing that, notwithstanding a few defects, it is a most readable book, and will most certainly maintain the high reputation which he has already acquired in putting forth works suited not merely for his own professional brethren, but also for the study of educated men generally. The plan of the work before us may be best understood in Dr. Madden's own words, as expressed in the following extract from the preface:—

"With regard to the plan of this work, I need hardly say much. In the first place I have endeavoured to lay before my readers a succinct view of the nature and uses of mineral and thermal waters. I have next described the various forms of disease that may be treated by this remedy, and pointed out the mineral water adapted to each particular case.

"In the second part, I have given a detailed account of the principal watering places of Europe, from my personal observations and notes, taken at each Spa. In doing this, I have sought to combine all the medical information essential for the prescribing physician, with those local particulars necessary to the invalid traveller.

"For the narrative and descriptive portion of this work, by which I have attempted to extend its interest beyond the class who would peruse a purely professional essay, I think no apology is necessary. But if it were, I might cite the example of other writers on mineral waters. Moreover, I can see no reason for the opinion of those who think that a medical writer, as such, is precluded from making those general observations which his acquaintance with human nature under various phases, his education, and those opportunities which his profession often give him of studying men and manners more intimately than other travellers, afford."

The body of the work consists of pp. 369, and contains 25 chapters, besides an introduction of 29 pages "On the Nature and Uses of Mineral and Thermal Waters." Chapter I. is on "Dyspepsia and the Spas," and chapter II. dilates "On Gout and its Treatment by Mineral Waters." We particularly recommend the perusal of the introduction, and of these two chapters. But, as the merit or demerit of a book of this kind lies largely in its style and composition, we shall give specimens from chapter XIX, commencing on page 258:

"The situation of Baden is exquisite; the town is accessible; the hotels and lodging-houses are commodious; the people are civil; the shops are good; the cursaal is the richest, and the mineral waters are the poorest on the Rhine. No watering place shows such evidence of prosperty; and none deserves it less. New streets and houses are rising on every side; the number of visitors is increasing each season; the mineral springs are recommended in almost every class of chronic disease, and are suited for hardly any."

"The great rendezvous of all the strangers in Baden is the cursaal or "Conversation-Haus," as it is called, on the *lucus a non lucendo* principle, since conversation is the last thing thought of in these saloons, where the hushed silence which generally reigns paramount, is broken only by the voice of the croupier as he announces the winning colour, or the click of the ball as it spins round the revolving disc. This cursaal always seemed to me by far the worst of the German gambling houses; there is no pretext of any other object—no reading or billiard rooms, as at Homburg or Wisebaden. In other Spas where gambling exists, it is bad enough, Heaven knows, but still it may be avoided, and invalids may, and do reside for the season without being brought into contact with the gaming table. But in Baden, gambling is the main characteristic of the place; it is thrust before one prominently at every moment, and it would be impossible to escape its atmosphere in the town; everyone speaks of it, everyone thinks of it, and not a few dream of it. As long as the rooms are open, from eleven in the morning till midnight, they are constantly crowded with players, and from morning till night an equal throng press about the tables in the vain pursuit of easy wealth—like moths round a flame, although their wings be often singed, yet the fascination is irresistible, and they still rush back to the danger, until, their golden pinions destroyed, they fall into and perish in the fire they have worshipped."

"The Baden Spa is still prescribed by many physicians, and employed by some patients; but out of the fifty thousand visitors whose names figure in the *Kur-liste*, comparatively few use the waters, either internally or externally. Every morning during my residence there, I visited the various springs and the old and new trinkhalles, and seldom met many valetudinarians at the sources. Occasionally, however, I saw a thin muster of invalids at the Ursprung, and always found some thirty or forty water bibbers in the new trinkhalle. Hardly any of the latter, however, had the aspect of sick people, and several of the gentlemen qualified the dose with some drops of a preparation, more potent than Ursprung water, which the very attractive feminine chemist behind the marble counter dispensed from a black bottle."

In conclusion, we cordially recommend this book not only to our own Profession, but to educated persons of every calling. If

only a very small part of the time spent on reading the iniquitous trash called "Sensation Novels" were used in obtaining the entertaining and important information supplied by books such as this before us, not only would it prove good for maintaining the *mens sana in corpore sano*, but it would also directly encourage literature of a most useful, but, unfortunately, not most popular kind.

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The Medical Press and Circular.

"salus populi suprema lex."

WEDNESDAY, JUNE 26, 1867.

THE GENERAL MEDICAL COUNCIL.

A RETROSPECT.—II.

The motion of Dr. Andrew Wood for a Committee "to report on the new course of Professional education to be gone through by all persons seeking entrance into the Medical Profession, in order to secure the possession by them of the requisite knowledge and skill for the practice of their Profession," plunged the Council on its second day of meeting *in medias res*, and the subsequent discussions on the Visitation of Examinations, and on Dr. Acland's eloquent speech, ensured for this subject all the elucidation which a thorough debate could confer on it.

If the Council possessed the vantage ground on which we stand, of summarising the propositions made, and the opinions expressed on them, they would, we fancy, have commenced at the right end of the subject, and thus escaped their involvement in much needless discussion.

All the suggestions for Examination Reform which have been as yet promulgated, while differing in their *modus operandi*, start from one common principle. The object of all is to fix such a standard of education as will secure uniformity in all professional qualifications, and while Dr. Andrew Wood asks the Council to do so by affirming a minimum standard, Dr. Acland and Mr. Rumsey hope to effect the object by establishing a Board of Examiners unconnected with any of the existing qualifying bodies, to act either in conjunction with them, or as a superior tribunal on a corrective principle, similar to that of the Examining Boards of the Army and Navy. Now, we venture to suggest that the first question to decide before proceeding to frame a system for securing uniformity of qualification, is whether we want uniformity at all, and it is on this point and not on the mechanical details that the greatest diversity of opinion exists. It is not surprising, when the facts are constantly forced upon the Council, that a Dutch Auction of Diplomas exists in the Profession in which those Corporations who desire to maintain a high standard of professional competency are, by the competition of less scrupulous bodies, absolutely starved into a reduction of their requirements—that the amount of Medical capacity which the public have a right to expect from the profession, is taxed down to a disgracefully insufficient amount by a system which makes it impossible for high-class education to be maintained—when these considerations, we say, are before the Council, it is not wonderful that they should jump to the conclusion that a uniformity of qualification is the elixir for the disease.

On closer consideration, however, it seems evident that beyond a certain limit uniformity of education would be neither possible nor desirable. In the first place, it is plain that the Council could only, under any circumstances, fix the limit in one (the downward) direction, for they could not forbid a University from demanding any requirement which its position may enable it to insist on, and if a uniform standard were fixed, it must evidently be at the lowest limit which any qualifying body could be permitted to adopt. If there were a uniformity in the public standard of a doctor's competency, this could be done at once, *if* the Council had the power and would take the responsibility of dragging up the underselling Corporations to their own theoretic level, but as long as the public demand a gradation of medical advice from the Prescribing Druggist to the Consulting Physician—from the shilling to the guinea fee—we can hardly understand where the Council is to place its mark of competency. The qualification which confers capability to concoct antibilious pills, or draw teeth at sixpence a-piece, could not be considered sufficient for the treatment of cases of urgent importance; and the Council is hardly in a position to insist on what it knows to be a thoroughly reliable amount of Medical education on the part of practitioners, who, from their line of practice, can hardly be supposed to require it.

The inevitable result, moreover, of a minimum of professional education fixed by the Council and legally recognised as sufficient for all the purposes of medical practice, would manifestly be that that standard would be universally accepted by the Profession and by Licensing Corporations. Every further requirement will be regarded as an unnecessary tax on the student, and, inasmuch as the low-class qualifying Bodies will have a legalised ground-work for

their examinations, the Corporations who desire to maintain a high position would find themselves in a worse position than ever.

Thus, the Council being unable, from the existing public demand for cheap doctoring, to place its standard at a high scale, would be establishing a dangerous and mischievous precedent, without in any respect remedying the present grievance.

In this view of the matter, it is evident that the Council is not at present in a position to enforce a high standard of medical qualification, and, therefore, though we willingly concede that such a consummation is "devoutly to be wished," we must pronounce against both Dr. Wood's, and Dr. Acland's schemes. A fixed standard is possible in France, because there it is in the power of the Government to place it wherever on the scale it may think fit, and from such determination there is no appeal. As a result, we have the very condition which we apprehend, for the fixed standard is the only standard, and no man can, even voluntarily, attain a higher *imprimatur*. The system also is carried out in the British Army and Navy, because the authorities are in a position to insist on any requirements they may desire; but until the Council is in a similar position of command, it would be useless to set down a standard which public convenience would forbid their maintaining.

Taking into consideration all the circumstances, we think that public competition at present provides as perfect a test of medical qualification as the Council could secure, and it would not be wise for them, by giving their legal countenance to a low standard of education, to discredit the efforts of Universities and Colleges, who are endeavouring, even at a loss, to main the intellectual position of the Profession.

SALE OF DISEASED MEAT IN DUBLIN.

It appears from the *Irish Times* that, within the last fortnight, about thirty oxen, sheep, and pigs, have been seized by the police, on the suspicion of their being diseased, and of these, nearly two-thirds were examined by Professor Cameron, and pronounced by him to be utterly unfit for use as human food. At the last sitting of the Lord Mayor's Court, as stated by the *Irish Times*, the seller and purchaser of a diseased pig were heavily fined. The carcase of the animal, it appears, was sold for 12s., to a sausage-maker, but was detected by the police on its way to the machine. Dr. Cameron deposed that it had died or been killed whilst suffering from a most loathsome disease, somewhat resembling scarlatina, and which is known under the name of "soldier." The flesh was red, and the skin covered with an eruption.

The *Irish Times* deduces from this narrative the conclusion that public slaughter-houses are required, and we concur in the opinion; but there is a still greater want—a spirit of independence in public journals which may induce them to do their duty to their readers, by making public the names and addresses of convicted persons, regardless of the sacrifice of popularity amongst butchers and sausage-makers.

When a sausage-maker can buy a diseased pig for 12s., and after disguising its disgusting condition in the process of manufacture, can sell it at a profit of about 1200 per cent., he can easily afford to pay a fine, when once in a twelvemonth he may be detected, and he and the equally culpable vendor can well afford to persist in their atrocious and disgusting frauds, when they escape public recognition under the distinction of the "*seller and the purchaser.*" With the aid of the *South London Press*, a spirited local journal, the authorities have almost succeeded in stamping out the frauds in weight, quality, and purity of articles of consumption, which seem to have been almost the rule amongst the tradesmen of the districts south of the Thames. We can never hope for the attainment of a similar result in Dublin, as long as the editorial cloak is thrown round "the seller and purchaser."

THE PURGATORY OF PERIPATETICS.—II.

Three weeks ago, in an article under this title, we gave a succinct account of the theory advanced by Dr. Chapman as to the cause of sea-sickness, and the means by which, in his opinion, it may be prevented, and we ventured to assert that it is the duty of those of our professional brethren, whose patients are about to visit the French Exhibition, to induce them to put the theory to the test in their trip across the Channel. Those of our readers who have done us the honour to carefully peruse that article, will, we doubt not, be disposed to admit that at least a fair case for inquiry has been made out. The theory is not only ingenious and original, but it is so intimately related to other important questions in physiology and therapeutics, and has been advanced with such confidence, and yet with such professional propriety by its author, that we thus early recur to the subject, in order to consider its strictly practical aspects. In doing so, it will be unnecessary to repeat even its outlines. Suffice it to say that Dr. Chapman believes that by modifying the temperature of the spinal region, we may produce most important curative effects in a great variety of diseases, and that as to the distressing malady under immediate consideration, the application of ice (in an appropriate india-rubber bag) to the spine, immediately arrests the vomiting, and if the remedy be employed early will as certainly prevent its occurrence.

In support of his statement, Dr. Chapman has already accumulated a sufficient number of successful cases to warrant any one in giving it a trial. In a pamphlet on the subject, he has detailed seventeen cases tending to show that this treatment is not only effective, but contrary to the expectation of many is particularly agreeable. According to the reports of his patients, it not only arrests or prevents the sickness, but the cramps or spasms that frequently accompany it, at the same time restoring the circulation to its normal standard, and so changing the pallid, cold prostrate condition of the victims of sea-sickness, to the ruddy, warm glow characteristic of health and activity of the circulatory function. Here then we have two distinct phases of the proposal to which to direct attention. First, the efficacy of the remedy; second, the agreeableness of the application. Each of these points deserves more space than we can afford for its discussion, but we will as briefly as possible touch upon each.

First as to the efficacy of the method. Amongst other evidence we find that Dr. Hayle of Rochdale had advised a patient to try it in a voyage across the Atlantic. The result was that "he was never sick when wearing the ice-bag. Once he went without it, and then, and then only, was he sick." Another interesting piece of evidence is the success with which it was used in the case of the son of Mr. Darwin, the eminent naturalist, in a voyage from Holyhead to Kingstown.

A lady, describing her trip from Dover to Calais, writes —"I think nearly every one was sick, and I, the usually worst of all, not only not sick, but even well. . . We reached Calais, and I had not experienced the slightest nausea." Another lady, who always suffered at sea before resorting to the ice-bag, and on two occasions had had epileptic fits induced by the ship's motion, made five comfortable passages between Folkestone and Boulogne. A third lady, who had been six times at sea and suffered each time, went from Newhaven to Dieppe "without experiencing the least sickness." Other evidence of an equally conclusive kind is adduced, but as we cannot find room for it all, we will select the testimony of Dr. B. Lee, an American physician, and who, being far removed, may be supposed to be as impartial as any. This gentleman relates a case in the Philadelphia *Medical and Surgical Reporter*, and then adds the following remarks :—

"If Dr. Chapman has proposed to us a means of alleviating, with almost perfect certainty, that most distressing malady, sea-sickness, we are criminally neglectful if we refuse to employ it. . . . The case (in question) is as conclusive as a single case can be, in regard to the great practical value of his discovery. . . . The effects of the application of the ice-bag were little short of miraculous. In three minutes the retching ceased and the spasms were calmed. In a quarter of an hour she (the patient) had fallen into a quiet sleep ; and in half an hour her hands and feet were of natural warmth, and her face had regained its wonted colour. In two hours she awoke, greatly refreshed, and from that time did not miss a single meal. I can see no reason why the process may not be successfully extended over twelve days as well as four (the treatment was continued during the whole voyage—a rough one, lasting four days and a half—with complete success), with proper care and management."

So much for the efficacy of the ice-bag. We pass now to the second point—the alleged comfort of the application.

It is not surprising that many people should regard the idea of applying a column of ice to the spine with a considerable degree of apprehension. Before Dr. Chapman demonstrated its safety it would generally have been pronounced dangerous, and a casual remark in Dr. Todd's Clinical Lectures shows that even that experienced Physician would have hesitated to employ it. It would seem, however, from numerous instances, that, properly applied, the ice is not only safe, but positively pleasant. Of course, the immediate arrest of the sickness is in itself a comfort which most people would gladly purchase at the expense of a painful process. But not only is the ice not painful, but, according to the testimony of the great majority of patients, quite the reverse. Besides staying the sickness and cramp, when present, the ice-bag restores the cutaneous circulation, so that the extremities become warm. Then the irritability of the stomach is so effectually subdued that light food can soon be taken, and the return of the appetite is very commonly reported.

Moreover, the soothing effect is so general, that sound and refreshing sleep is frequently induced, so that we constantly read of patients—men, women, or little children —falling asleep on the ice-bag, and waking up refreshed and hungry.

If the theory which we have so fully explained be correct, these results might have been predicated, for they are but the natural effects of a remedy acting in the manner proposed. Still, as not a few may be glad to have some of the encouraging facts before them, we will give from Dr. Chapman's detailed reports the following striking statements respecting the agreeable effects of his mode of treatment, as the most likely method of inducing our readers to collect still further evidence.

Case 1.—"I think nearly every one was sick, and I, the usually most of all, not only not sick, but even well, feeling as if I were in a cradle, being rocked by the gentle hands of a tender nurse. . . . I don't know, of course, the effects of ice on a long-continued voyage, but I venture to believe that the feeling of perfect comfort would continue as long as the ice is kept on."

Case 2.—"Felt the cold to the back peculiarly grateful, but wished it more intense ; bag therefore placed next the skin. This change delighted her."

Case 4.—"Ten minutes after vessel started, became violently sick ; muscular effort extreme ; said, 'I think my heart is coming up!' Applied ice along the entire spine as quickly as possible, *instantaneously* relieved, lay down upon the ice soothed and calm."

Case 6.—"About twenty minutes before reaching Boulogne, ice in bag so nearly melted, that felt the refreshing and sustaining influence of the cold lessening ; placed an additional bagful of ice outside dress, over bag already supplied ; this sufficed to restore the agreeable sensations hitherto enjoyed, and to continue them until at Boulogne."

Case 9.—"During the second two hours (of the passage to Dieppe) was fast asleep—lying on the ice. . . . Particularly impressed with the relief afforded by the ice, from the great suffering in the head, had always experienced at sea."

Case 10.—"After lying upon the ice, both sickness *and headache* ceased entirely."

Case 11.—"Was lying down very sick with acute headache. Was laid on a bag of ice, the bag next the skin. The head became quite free of pain in a few minutes. . . . Still lying on the ice, fell asleep. In about half an hour awoke quite well, and continued so."

Case 12.—"Put on an ice-bag ; felt ill about fifteen or twenty minutes, then rapidly recovered ; all nausea, sweating, and chilliness ceased ; the colour returned to my face, as observed by the captain and some of the passengers ; the troublesome threats of diarrhœa and uncomfortable sensations in the bowels passed away, and I continued quite well—really enjoying the remaining five hours of the passage to Dieppe. I wore the ice nearly the whole time."

Case 14.—"Felt the cold agreeable and refreshing ; in a few minutes said he felt better ; before long expressed astonishment at finding all uncomfortable sensations, together with nausea, wholly gone."

Case 15.—"Fears the sea so much as to be in a fright the whole time ; this time was not frightened at all after the ice had been applied."

Case 16.—"Soon became warm, and fell asleep with the ice on her back. She awoke very hungry, and quite well."

Case 17.—"She was so delighted, poor creature, she thanked me a thousand times. The ice made her quite well, and she went to sleep with it on her back."

Notes on Current Topics.

The Princess of Wales.—At length it appears that the improvement we have mentioned in the state of the Princess of Wales has become decided. It is well-known that, at the request of the medical attendants, Mr. Heather Bigg has arranged a mechanical support for the limb, which has proved very comfortable. After a time it

is believed that this may be dispensed with, and that in the end the use of the joint will be restored. On Monday last Mr. Bigg adjusted the support so as to permit of carriage exercise.

University Representation.—This question has been prominent during the week. After a most obstinate contest the House of Commons has rejected the proposition of the Government to unite the University of Durham with that of London. Nothing but the most earnest work and thorough determination on the part of the friends of the London University would have saved it from the danger by which it was threatened. It is quite astonishing how any Government could have seriously insisted on such a proposal. The outcry of the organs of public opinion against the incongruous union was almost universal, yet the Government persevered. The battle was long and uncertain, but victory at last fell to the metropolitan seat of learning, and probably no further attempt will be made to neutralise its influences. As to the Scotch Universities several other names have been mentioned as likely candidates, but up to this time nothing very decisive has transpired. Dr. Clark is likely to be well supported for Glasgow and Aberdeen. For Edinburgh and St. Andrews a medical graduate will only, with difficulty, be secured, unless the St. Andrews Association should be as successful as it is hoped. Another meeting was held on Wednesday, which shows that the Society is likely to take a firm hold on the general body of graduates. A report of the meeting will be found at page 611.

Shocking Case of Mortality.—A person named Carter resides at Newcastle, on the Barrack-road, opposite the Leazes, in one of a row of houses which, although situated in the healthiest part of the town, are badly drained, the road unpaved, whilst a lane at the back is described as being in a disgustingly filthy state. This man had five children, who were all well on Saturday morning. In the evening one of them died with all the symptoms of pestilential fever. On Sunday another child died, and on Monday another. On Tuesday when the parents returned home from burying these three children they found a fourth just dead, and on Wednesday night the fifth and last succumbed to this fearful disease, the origin of which is attributed by the neighbours to the want of necessary sanitary precautions. In reference to this, it may not be out of place at this season to direct attention to a common cause of disease in the neighbourhood of London and other large towns. Land let for building purposes is excavated for brick-making during the summer. A notice is then stuck up, that "Rubbish may be shot here." The holes are filled up during the winter and spring with the refuse of dust-yards and other abominations, animal and vegetable, in which, when somewhat solidified, the foundations are laid and the road made. Is it to be wondered at if the action of the summer's sun converts this into a seething mass of corruption, polluting the atmosphere and poisoning the inmates?

University College, London.—This Council held a special meeting for the award of the Atkinson Morley Surgical Scholarship (£45 per annum for three years) on Saturday, the 15th of June, Founder's day. The scholarship was conferred on Mr. George Vivian Poore, of Andover. The examiners were Professors Erichsen, Wharton Jones, and Marshall, and Mr. Berkeley Hill.

Foreign Medical Literature.

INVESTIGATIONS RESPECTING ARTERIAL DILATATION AS A RESULT OF NERVOUS IRRITATION.

By Dr. CHRISTIAN LOVEN.

TRANSLATED FROM THE "HYGIEA" FOR NOVEMBER, 1866, P. 425.

By WILLIAM D. MOORE, M.D., Dub. et Cantab., M.R.I.A.;

HONORARY FELLOW OF [THE SWEDISH SOCIETY OF PHYSICIANS; OF THE NORWEGIAN MEDICAL SOCIETY; AND OF THE ROYAL MEDICAL SOCIETY OF COPENHAGEN; EXAMINER IN MATERIA MEDICA AND MEDICAL JURISPRUDENCE IN THE QUEEN'S UNIVERSITY IN IRELAND.

The following essay is a translation of an account of the investigations instituted by me in the winter of 1865-66, in the Physiological Laboratory at Leipsic, under the direction and with the able co-operation of Professor C. Ludwig, which was published in the *Berichte der kön. Sachs. Gesellschaft der Wissenschaften, Mathematisch-Physische Classe*, for May, 1866. Partly because this journal is little circulated here, partly because the essay relates to various questions which ought to possess great interest also for the practical physician, I have not hesitated to comply with a request that I would publish it in Swedish, and I also seize the opportunity of publicly acknowledging the great obligation under which I lie to Professor Ludwig, without whose active assistance my investigations would probably not have fulfilled their object. I am the more anxious to do this, as, with the liberality characteristic of him, he has not permitted any reference to my obligation to him in the German original :—

1.—*Changes in the cardiac impulse and in the pressure of the blood, which occur during irritation of a sensory nerve, being in connection with the brain and spinal cord.*

Every painful irritation of a sensory nerve produces, in a healthy animal, such numerous phenomena, all of which may alter the current of the blood, that it would be impossible in this mode to investigate the relation between irritation and change in the circulation. The attainment of this object first became possible, when we obtained the aid of *Curare*. Principally with the employment of this poison have I instituted the following experiments upon this subject in the physiological laboratory in Leipsic.

The phenomena observed in poisoned animals after irritation of sensory nerves, consist in changes in the impulse of the heart, in the diameter of the small arteries, and in the pressure of the blood. As changes in the cardiac impulse, and in the pressure of the blood in themselves give us two conditions capable of acting on the bore of the arteries, we must evidently first inquire how, and under what circumstances, the cardiac impulse and the pressure of the blood vary, before we can enter upon the solution of the question, what direct connection exists between the sensory irritation and the change in the diameter of the vessel? So far as I know, von Bezold is the only investigator who has instituted experiments to determine the state of the impulse of the heart, and of the pressure of the blood after a sensory irritation. Important as the results collected by this distinguished physiologist are—they were, because his experiments were undertaken from other points of view, not sufficient for my object, on which account I found myself compelled in some respects to complete them. Before proceeding to give an account of my experiments, I will, as briefly as possible, state the results obtained by Von Bezold. The animals of which he made use were, with few exceptions, poisoned with curare, and the trunks of the vagi and sympathetic nerves were divided in the neck. Moreover, in various series of experiments, several changes in the brain and spinal cord were produced, principally consisting in this: that an incision was made either beneath or above the medulla oblongata; lastly, in some cases the brain and spinal cord were left untouched. The irritation was applied either to the sensory spinal nerves or to the central extremity of the divided vagus.

(*a.*) Brain and spinal cord in their normal state; irritation of the brachial or ischiatic plexus. The cardiac im-

pulse became harder, and the pressure of the blood began to increase immediately after the irritation.

(*b.*) The medulla divided above or below the medulla oblongata; irritation of sensory spinal nerves. Pressure and cardiac impulse continued unaltered.

(*c.*) Medulla oblongata separated by an incision from the rest of the brain; irritation of the central stump of the vagus on one or both sides. The pressure of the blood falls immediately after the commencement of the irritation, the number of heart's beats is diminished, and after the cessation of the irritation the pressure of the blood does not reach the height it had before the application of the irritant.

(*d.*) Brain and spinal cord in their normal state; irritation of the central vagus stumps. In this mode of instituting the experiment either a sinking or an increase of the pressure of the blood occurred directly on the commencement of the irritation. In some cases the pressure remained, so long as the irritation continued, either at its elevated or depressed value. In others, on the contrary, an increase or diminution of the pressure over or below the normal value, alternated with each other during the experiment. If the pressure was increased the number of the pulsations was also increased.

These facts leave it undecided, whether the increase of the pressure of the blood depends upon an elevation of the heart's action, or upon increase of resistance in the course of the circulation. To ascertain this so far as I could, I determined to alter the experiment by, in opposition to von Bezold, leaving the vagus uninjured. Moreover, I directed my attention to the state of some small arteries in the ear and hind leg. In the last named extremity I was accustomed to expose the saphena artery, which, as is well-known, is remarkable for its irritability. If the auricular vessel was observed, the central end of the posterior or anterior auricular nerve was irritated; if, on the other hand, the arteria saphena was exposed, the central portion of the nervus dorsalis pedis was tetanised. The results obtained from three animals are given in the subjoined table. To these a series of observations is added from a fourth animal, in which the nervi vagi were divided during the course of the experiment :—

OBSERVATIONS ON THE LEG.

	Mean pressure in the Carotid Artery.	Number of the pulse in the same time.	Diameter of the Arteria Saphena
I.	mm.		
1. Before poisoning with curare	86	...	
Poisoning without irritation	89	100	
Irritation of the nervus dorsalis pedis	126 114	49	Diminished.
Irritation of the nervus dorsalis pedis	101	52·5	Increased.
II.			
1. Before poisoning	84	100	
Poisoning (not complete)	95	79	
Irritation of the nervus dorsalis pedis	145	46·5	Diminished.
Later	145	51	Diminished.
2. Before irritation	95	100	
In the commencement of the irritation	119	65	Diminished.
Later during the irritation	110	69	Increased.
III.			
1. Before the poisoning	102	100	
Poisoning (during irritation)	137	61	Unaltered.
2. Without irritation	95	100	
With irritation (max.)	135	80	Unchanged.
Later	97	90	Considerably increased.
IV.			
1. Before the poisoning	116	100	
After poisoning	145	107	
Irritation of nervus dorsalis pedis	190	76	
VAGI DIVIDED.			
2. Before irritation	122	100	
During irritation	147 131	80	
3. Before irritation	129	100	
During irritation	152	103	
4. Before irritation	173	100	
In the commencement of the irritation	181	95	
Later	163	...	
Later	175	...	Inconsiderable increase.
Later	175	...	

OBSERVATIONS ON THE EAR.

	Mean pressure.	Number of the pulse	Diameter of the Arteria Auricularis.
I.	mm.		
2. Before irritation	63	100	
Immediately after the commencement of irritation	107	57	Diminished.*
Later during irritation	127	31·5	Diminished.*
Later during irritation	81	52	Diminished.*
II.			
3. Before irritation	101	100	
During irritation	109	45·5	Not observed.
After irritation	99	75	Not observed.
4. Before irritation	106	...	
Irritation	134	...	Little diminished.
Irritation	106	...	Increased.
III.			
3. Before irritation	100	...	
During irritation	131	...	Unchanged.
4. Before irritation	95	...	
During irritation	112	...	Unchanged.
Later	103	...	Increased.
Later	133	...	Not observed.

* The diminution of the frequency of the pulse, and the increase of the pressure of the blood, occur also after mechanical irritation of the auricular nerve. In all cases the pulse does not become slower, until after the pressure has considerably increased.

If we now put together in words what is contained in the above table, it thence appears that :—

(1.) The pressure of the blood is in the unpoisoned animal usually lower than in the poisoned; the number of the cardiac pulsations may, at the same time, be less or greater in the poisoned animal than in the unpoisoned. I would here remind the reader of the well-known fact, that the small arteries become remarkably more compressed in consequence of poisoning with curare.

(2.) After irritation of the auricular nerve, as well as of the nervus dorsalis pedis, the number of the cardiac pulsations is invariably diminished, and in spite thereof the pressure of the blood increases very considerably. The curve of pressure at the same time exhibited this peculiarity, that the periodical elevations and depressions, which before and after the irritation were caused by the artifical respiratory movements, now disappeared. All these particulars show, that the increase of the pressure is by no means attributable to increased action of the heart, but rather to an obstruction to the efflux. This view is corroborated by the experience noted in the fifth column of the Table. If, in fact, the pressure of the blood increased considerably, notwithstanding that the heart's pulsations became slower, the visible small arteries had contracted to the disappearance of their bore. If, on the contrary, the pressure of the blood sank under irritation, the arteries became dilated.

However, the pressure of the blood in the six instances, in which, according to the Table, the arteries observed became dilated, did not sink below its value previously to the irritation, but fell, in the most favourable case, only to the degree it occupied before the irritation. As dilatation of the arteries must necessarily be attended with a diminution of resistance, we might expect that the pressure of the blood would sink beneath its normal value. Two ways are open to us to find an explanation of this absence of the expected result. Either the force of the heart is increased —against this assumption the numbers in the Table, without exception, tell, for these show, that even where arterial dilatation has occurred, the number of the heart's pulsations was less than before the irritation. We are, therefore, it seems to me, referred to the other mode of explanation. This would then require the assumption that the dilatation had not extended itself to all arteries, but merely to precisely that which was observed, and perhaps to some others, while a more or less considerable contraction remained in all the others. I am the more inclined to lean to this hypothesis, since, as my observations, to be presently communicated, prove, the dilating influence of a sen-

sory nerve does not in general extend beyond the peripheral region of expansion of the nerve in question ; and, in very fact, I had also observed precisely the artery, whose special nerve was irritated. Otherwise, it is evident that many experiments are desirable towards clearing up the actual circumstances of the matter.

(To be Continued.)

THE ST. ANDREWS MEDICAL GRADUATES' ASSOCIATION.

THE second meeting of this Association was held at the Freemason's Tavern, Great Queen-street, on the 19th inst. On this occasion it was agreed to keep up the union of the Graduates by an annual session, commencing on St. Andrew's Day, or such other day as the Council might determine, and that the meeting should terminate with a dinner. It was decided that at the annual session, the discussion should be not only for the advancement of the science and art of medicine, but for that of general science and literature, the maintenance of the interests of the medical graduates of the University, and the cultivation of social intercourse and good fellowship.

The minutes of the last meeting were read by Dr. Leonard Sedgwick, the Honorary Secretary, and unanimously agreed to.

Dr. RICHARDSON (chairman and president) said the letters received were too numerous to read, and that the members already numbered 253, and many other graduates had expressed their intention of joining. In sixteen days, more than 250 names had been added to the list. The last meeting was especially convened for the consideration of the subject of their enfranchisement, but on the present occasion they met not only to establish the Association, but to found it on such a basis that it should be permanent after the present cause for their union had passed away.

Dr. M'INTYRE said he had written to Mr. Slater Booth, and read a letter from Mr. Beech to say, that a satisfactory clause would doubtless be introduced, and another which stated that the subject would be considered by the Lord Advocate.

Dr. RICHARDSON said that thirty Members of Parliament could be obtained on their side. He wished that the Association should be a distinct organization, meeting at a central place annually, and also that there should be a dinner. He had seen Mr. Ellis, the Member of Parliament for St. Andrews, who advised that there should not be a deputation to Government. Dr. Paul, the treasurer, was prevented from coming, but he would state that £53, 15s. had been received, of which they had £40 in hand.

The rules were proposed and seconded *seriatim*. There was a long discussion as to whether the associates should be elected or admitted on payment of their subscription, and to prevent the presence of objectionable members, a penal clause was proposed, but the suggestion was not acted upon, and the rule for their admission finally passed runs as follows:—"That all legally qualified medical practitioners be eligible as associates on election by the Council."

Dr. DRYSDALE strongly advocated the principle of examination followed in the St. Andrews and London Universities, and expressed his opinion that a degree should be general in the profession.

Dr. M'INTYRE drew attention to the Bill, and said he thought it would be satisfactory, if the offending clause were removed, or the date 1833 placed instead of 1863.

Dr. RICHARDSON refuted an idea which, he thought, was rather general, namely, that St. Andrews degrees had at one time been sold without examination, and read a letter from the Registrar stating that that was never the case.

Drs. SEDGWICK and WYNN WILLIAMS showed that a very considerable number of St. Andrews graduates were on the staff of the different public charities, and that twenty-four were connected with the London and provincial medical schools.

The following is the list of officers elected for 1867-8 :—

President—B. W. Richardson, M.A., M.D., F.R.S., London.

Vice-Presidents—Henry Day, M.D., Stafford ; Dr. Thiselton Dyer, London ; Dr. Greenhalgh, London ; Dr. and Inspector-General Leonard, Norwood ; Dr. Tanner, London ; Dr. Wyse, Dublin.

Council—Dr. G. Balfour, Edinburgh; Dr. T. Ballard, London; Dr. Edwards Crisp, London ; Dr. Collett, Worthing ; Dr. Crawford, Peebles ; Dr. D. Davies, London ; Dr. Davey, Bristol ; Dr. Drysdale, London ; Dr. Dudfield, London ; Dr. Fayrer, Henley-in Arden ; Dr. Dean Fairless, Coupar-Angus ; Dr. Day Goss, London ; Dr. P. Hood, London ; Dr. Prosser James, London ; Dr. Walter Jones, London ; Dr. Mackinder, Gainsborough ; Dr. M'Intyre, Odiham ; Dr. Minter, Southsea ; Dr. Nichols, Devizes ; Dr. Procter, York ; Dr. Roden, Kidderminster ; Dr. Joseph Rogers, London ; Dr. Lloyd Roberts, Manchester ; Dr. Seaton, Sunbury ; Dr. Sheppard, Colney Hatch ; Dr. Skinner, Liverpool ; Dr. Abotts Smith, London ; Dr. Spencer Thompson, Torquay ; Dr. Tuke, London ; Dr. Uvedale West, Alford ; Dr. Wynn Williams, London.

Honorary Treasurer—Dr. Paul, Camberwell.

Honorary Secretary—Dr. Sedgwick, 2, Gloucester-terrace, Hyde-park, London.

PROPOSED RULES.

1. That the Association be called THE ST. ANDREWS MEDICAL GRADUATES' ASSOCIATION.

2. That the objects of this Association be the advancement of the Science and Art of Medicine, the maintenance of the interests of the Medical Graduates of the University, and the cultivation of social intercourse and good fellowship amongst them.

3. That the Association consist of Members, Honorary Members, and Associates.

4. That all Medical Graduates of the University of St. Andrews be eligible as Members.

5. That all Members of the General Council, all Professors, and all non-medical Graduates of the University of St. Andrews, be eligible, on election, as Honorary Members, as well as such other learned and scientific men as may be elected at a General Session, on the recommendation of the Council.

6. That all legally qualified medical Practitioners be eligible as Associates.

7. The subscription constituting a Member or Associate shall be Five Shillings, payable on the 1st of January annually.

8. The Officers of the Association shall be elected from the Members, and shall consist of a President, Six Vice-Presidents, a Treasurer, a Secretary, and a Council of Thirty-two; in whom the power of framing bye-laws, and of directing the affairs of the Association, shall be vested.

9. Five members of the Council shall form a quorum.

10. The Officers of the Association shall be elected by ballot at the General Anniversary Session of the Association.

11. The President, Vice-Presidents, and Council, shall be eligible for re-election, except that of the Vice-President's two, and of the Council eight, shall retire every year.

12. The business of the President shall be to preside at the Annual and Extraordinary Sessions of the Association, and at all Meetings of the Council ; in his absence one of the Vice-Presidents, or the Treasurer, or any Member of the Council chosen by the Members present, shall take the chair.

13. The Treasurer, or some person appointed by him, shall receive all moneys due to the Association.

14. The money in the hands of the Treasurer, which shall not be immediately required for the uses of the Association, shall be vested in such speedily available securities as shall be approved of by the Council.

15. The Council shall lay before the Members, at each Anniversary Session, a report of their proceedings during the past year, and also an account of the receipts and expenditure of the Association.

16. The Council shall meet at least once in two months, unless by special resolution to the contrary.

17. The annual accounts of the receipts and expenditure of the Association shall be audited by a Committee of three Members, selected at the preceding Anniversary Session from among the Members at large.

18. The Secretary shall have the management of the general correspondence of the Association, and of such other business as may arise in carrying out its objects.

19. That the Association shall hold an Annual Session, commencing on St. Andrew's day, or on such other day as the Council may determine. The place of such Session, its duration, and the business to be transacted, shall be arranged by the Council.

20. That the Members and their friends shall hold an Anniversary Dinner on the last day of each Annual Session, at such place and time as the Council may determine ; the President for the year shall be in the chair.

21. No alteration in the Laws of the Association shall be made, except at a General Session. Notice of the alteration

to be proposed must also have been laid before the Council at least a month previously.

22. The Council shall have power to call a General Session of the Members at any time, and shall also be required to do so within one month, upon receiving a requisition in writing to that effect from not less than twenty Members of the Association.

23. All Special General Sessions of the Association shall be held at such place as the Council may appoint.

Correspondence.

"TREATMENT OF AGUE BY HEAT TO THE SPINE."

TO THE EDITOR OF THE MEDICAL PRESS AND CIRCULAR.

SIR,—In your paper of the 5th inst. there appeared an interesting letter on the treatment of ague and cholera by heat to the spine, concerning which I think it desirable that I should make a few remarks.

In accordance with the neuro-pathology and therapeutics exemplified in my reports of the several cases of epilepsy and paralysis already published in your columns, I have advocated the use of cold along the spine during the cold stage of fevers, and of cholera—which I regard as a form of fever, with an extremely prolonged cold stage.

"I have had but slight experience in the treatment of fever, but I anticipate that fevers of all kinds will be most effectually controlled by cold along the spine in the cold stage, when the blood-vessels are contracted, and heat in the hot, when they are relaxed. I apprehend that the prolonged stage of the so-called *fievre algide*, common on the shores of the Mediterranean, may be cut short by means of ice. Of course, in cases of fever due to zymotic poisons, this treatment cannot remove the cause; but neither can any known treatment do so. Cold in the cold stage, and heat in the hot, will, however, I predict, exercise an effective controlling or restraining influence on all forms of fever, the exanthemata included."* Moreover, the whole purport of the work from which this passage is quoted is to prove, both by reason and experience, that the most scientific and successful method of treating cholera during every stage of its development until reaction sets in, consists in the appropriate application of cold along the spine.

The recognition by an "M.D., M.R.C.P. Lond.," that such important diseases as ague and cholera may be most successfully treated by modifying the temperature of the spinal region, is a step onwards towards the establishment of my pathological and therapeutical views, and therefore gives me much pleasure. As, however, the interesting facts he mentions seem at first to contradict those views, his letter suggests some important questions which I proceed to state and answer.

1. Seeing that I advocate the application of cold along the spine during the cold stage of ague, whereas "M.D.'s" experience is that heated bricks, wrapped up in cotton cloth and applied "to the spinal cord," rapidly cut short "the cold stage of ague, even on first application," the questions arise—Can the two methods, so opposite to each other as they are, be right? If not, which is right?

2. Seeing that I advocate the application of cold along the spine in cases of cholera until reaction sets in, whereas "M.D." says, one of the native doctors told him that he used the "hot treatment in cholera, by means of braziers of hot fire, *i.e.*, live charcoal, put under the bamboo couch, on which his cholera patients were laid naked, then covered over above, except the face, with thick warm clothing;" and that "the intense cramp and suffering of this unknown malady was checked remarkably with cessation of rice-water evacuations and vomiting"—the relief being "invariably followed by copious offensive discharges from the bowels the next day," the same questions arise as in the former case, viz.—Can the two methods, so opposite to each other as they seem, be right? If not, which is right?

3. If one only of these methods is at once scientifically correct, and therapeutically successful, why is there a semblance of right in the other?—or, in other words, what is the significance of the success in the treatment of the cold stage of ague and cholera, which "M.D." reports.

In the first place, physiological and pathological facts afford strong reasons for believing that during the cold stage of ague, the spinal and sympathetic nervous centres are hyperæmic, and that therefore ice applied along the spine is likely, by lessening the hyperæmic condition, to cut short the rigor. I need only allude to the fact, now so well established, that by section of the cervical sympathetic, an afflux of blood to the head is induced, and that by galvanising the cut end of the upper part of the nerve, the blood vessels of the head are made to contract. Now, the application of ice along the lower cervical and upper dorsal spine, produces an effect of a kind like to that resulting from section of the nerve, an effect, however, far short, of course, of the total paralysis caused by the knife. On the other hand, the application of heat along the same region, stimulates the nervous centres, and thus produces effects analogous to those produced by galvanism of the sympathetic, viz.—contraction of the blood-vessels controlled by the branches of the nerve influenced, and, therefore, coldness of the parts amid which those vessels ramify. The recognition of these facts seems to lead inevitably to the conclusion that during the cold stage of fevers, ice applied along the spine is likely to prove beneficial, and that when reaction sets in, heat should be applied along the same region.

The accuracy of this conclusion is proved by a large number of pathological and therapeutical facts which I have observed and recorded. The coldness and pallor which accompany seasickness, quickly give place to the ruddy glow of health when ice is applied along the spine. In several of the cases of epilepsy and paralysis reported by me recently in this journal—cases in which the extremities had been remarkably cold for long periods, sometimes for years—a normal circulation was re-established, the cold limbs becoming quite warm under the influence of the spinal ice-bag. I also mentioned one case in which a hot head was made cool by the application of heat to the spine. I could adduce a large number of like cases, but the most decisive proof of the power of heat appropriately applied on each side of the spine to contract blood-vessels, consists in the evidence which I have published, that menorrhagia can be most effectually and rapidly arrested by the application of heat along the lumbar and lower dorsal region. In presence of these facts, I feel constrained to express my strong opinion that the application of heat to the spine during the cold stage of ague, is not likely, as a general rule, to be attended with benefit, and that it may prove dangerous; whereas both science and experience counsel the use of cold during this stage.

As already said, I regard cholera as a fever, the cold stage of which is extremely prolonged; and, as I hold the opinion that during the whole period of this disease until reaction sets in, the arteries in nearly all parts of the body [I have indicated the exceptions in my work on *Diarrhœa and Cholera*] are spasmodically contracted more or less according to the stage and intensity of the disease, I am, of course, led by the facts and reasoning above-mentioned, to apply ice so long as any algide symptoms remain, just as I should do throughout the cold stage of ague. And again I feel bound to express, as strongly as possible, my conviction that the application of heat along the spine during any stage of cholera before reaction sets in, will both distress the patient and tend to hasten his death. Notwithstanding the extremely adverse circumstances under which the method of treating cholera patients by means of the spinal ice-bag was tried in Southampton in 1865 and 1866, twenty-six out of thirty-three patients in collapse were completely rescued from that state, and four more were rallied—two of them to a great extent. I have also published other cases in which the application of ice to the spine of patients in collapse, resulted in the speedy arrest of the cramps, vomiting, and purging, and the production of a steady reaction from the algide state. On the other hand, when reaction has fairly set in, and by developing into fever becomes dangerous, it may be controlled, as I have proved experimentally, by the application of heat along the spine: a case was published some time ago, in Calcutta, which exemplified, in the most signal manner, the power of the ice to recover the patient from collapse, and the power of the heat afterwards to assuage and subdue the reactionary fever. My doctrine that the application of heat along the spine during choleraic collapse is both distressing and dangerous, receives some confirmation from the statement of Dr. J. Wilson Macloy, who last year treated seven cases of cholera at Liverpool, by means of cold and heat to the spine. He used the two alternately, and he says—"While the ice-bags to the spine were borne without complaining, a similar application of water at 120° Fahr., caused the greatest pain."

* "Diarrhœa and Cholera: their Nature, Origin, and Treatment, through the Agency of the Nervous System. By John Chapman, M.D. 2nd edition, enlarged, pp. 15-6.

All the seven patients died—a result which was far from surprising me.

In conclusion, I will give what appears to me to be the correct answer to the third question, which I have propounded, viz.—assuming the doctrines above expressed, what is the significance of the success in the treatment of the cold stage of ague and cholera by means of heat, which "M. D." reports? I must observe, in the first place, that it is impossible to discuss this question satisfactorily without more precise knowledge of "M. D's" case of ague, than he has supplied. He does not say how long the hot bricks were applied, and whether they were applied lengthwise, along the spine only, or over the back generally. But taking the case as he reports it, I explain the good result obtained as one of reflex action, and as analogous to the alleged action of a cold key, when put down the back, in arresting bleeding from the nose. The whole amount of iron in an ordinary door key is small, and therefore, when it is applied to the spine, the amount of heat which it can abstract is small, and consequently it quickly ceases to exert any direct influence, even if allowed to remain in contact with the spine; but, in fact, as I am told, the key is passed down the back, allowed to fall between it and the clothes, and is then picked up and reapplied. Now, in this way, a sudden but transitory impression of cold is transmitted to the spinal cord, and this is quickly followed by a corresponding but more enduring *reaction*, which consists in a slight preternatural afflux of blood in the nervous centres, or, in other words, a condition like to that which would be induced by the application of a moderate degree of heat. It is this condition of the nervous centres thus induced, which is the proximate cause of the arrest of the hæmorrhage. And, in like manner, though conversely, when heat is applied to the spine for a short time, as in the case of the hot bricks wrapped up in flannel, their application, if restricted to the spinal region, only causes in the nervous centres acted upon temporary hyperæmia, which was, I apprehend, followed, in the case in question, by a more enduring reaction, resulting in anæmia of the same centres—anæmia which necessarily ended the cold stage of the ague fit.

In respect to the report made to "M. D." by the "native doctor," who used the "hot treatment in cholera," I must premise that the report does not seem to me reliable, for it states that after the occurrence of "rice-water evacuations," copious offensive discharges followed the treatment, whereas I am not disposed to believe that such discharges occur during the first stages of recovery in cases of algide cholera, where there have already been copious rice-water evacuations. But even admitting the truth of the native doctor's statement, his results are in no sense inconsistent with the method of treatment which I advocate: to place a patient naked on a bamboo couch, to cover him over with thick warm clothing, and to put beneath the couch "braziers of hot fire, *i.e.*—live charcoal," is merely to give the patient a hot air-bath in an eastern fashion. The heat in this case is not concentrated along the spine, but diffused over the surface of the body generally, and undoubtedly acts very beneficially in facilitating the return of the blood to the surface of the body. If superadded to this process an ice-bag were simultaneously applied along the spine, and were carefully guarded from the surrounding heat by non-conducting material, my method of treatment would be exactly realized, and the patient would, I am sure, have a far greater chance of recovery.—I am, Sir, yours truly,

JOHN CHAPMAN.

PREVENTION OF VENEREAL DISEASE.

TO THE EDITOR OF THE MEDICAL PRESS AND CIRCULAR.

SIR,—I have read with great interest the reports of the several meetings, held by the Venereal Committee of the Harveian Society, as published in your valuable journal, still, it appears to me, that the Committee entirely overlooks the true primitive cause of the propagation of the venereal disease, for surely it is not the women who first infect the men, but, on the contrary, the men who first communicate the disease to the women; consequently, I am afraid that the labours of the Committee will be in vain, if some means are not found to prevent men from infecting the women.

To submit the unfortunate girls of this country to the police regulations which are inflicted upon them on the Continent, would be both useless and degrading. It is known that in Vienna, Paris, Berlin, and every other large town of the Continent, the hospitals are filled with the most inveterate and appalling cases of venereal diseases, *and that* in spite of the weekly medical examinations of these unfortunate women. And this is easily understood, for suppose that a woman who is, let us say, examined to-day, has been contaminated a few hours after her last examination, of course the disease will only be visible in a day or two, so that the poor woman will innocently communicate the disease for five or six days until she is examined again.

I have also read a report of the Society for the rescue of young women, &c., &c., and I see that through the labours of this admirable Society, about 1000 of these poor girls are yearly rescued in England. Now, sir, I am confident, that if these medical examinations take place in the United Kingdom, there will not be the fourth of that number.

These exposures by *ordonnance* degrade them in their own eyes, and they soon loose all self-respect. It is not all at once that a young girl lately seduced looses her modesty; but then, *if by law* she is to submit herself to the most degrading inspection, she will soon not care to what abuses she is put, the vice will soon loose all its horrors, and she will fall to the lowest grade of libertinage without the slightest hope of redemption.

I will say, then, that to submit these poor girls to a medical examination, in order to eradicate this horrible disease, is to begin by the wrong end. We know that these unfortunate girls were once pure and innocent children—the delight of their parents. We know that a great many of them are often seduced and abducted before they have attained the age of discrimination, and left destitute on the streets, after the transient passion of their seducers has been satisfied. They are not, then, the originators of the disease, but *its victims*.

Why not then first examine the men, who are truly the originators and propagators of the disease?

Could not every house resorted to by these poor girls, be registered, and open under a heavy fine, to receive strangers during certain hours only, say from 4 P.M. to 12? A medical man, paid out of the registration money, could be attached to each house, in order to examine every man who would resort to it during the said hours. Means might be found, a mask for example might be used to save their *modesty*.

If I do not make a mistake, some stringent regulations as regards men would tend more to the eradication of the venereal diseases, than all the examinations of women. I know that the examination of men will not be quite so attractive as that of women, but it will be conducive to much more certain and happy results, being besides much easier and not compulsory as that of the women, for the men who would be examined would have nobody but themselves to blame for it.

I trust this view of the subject will be taken into consideration by every person interested in the matter, and especially by the Harveian Society, and the Society for the rescue of young women, &c., &c.

By the Harveian Society, in order to devise the best means to protect and prevent the women from falling the victims of the immorality of men—I say immorality, for their is no excuse for men in a state of disease to go and communicate it *knowingly* to any woman.

By the Society for the rescue of young women, &c., &c., in order to use their influence to prevent Parliament, *if necessary*, from passing a measure comparatively useless as far as prevention of the disease is concerned, and so much calculated to annul their noble and generous efforts for the rescue of these unfortunate and ill-used women.—I have the honour, &c.

E. L.

THE COUNTY INFIRMARIES OF IRELAND.

TO THE EDITOR OF THE MEDICAL PRESS AND CIRCULAR.

SIR,—There is a subject closely affecting a large section of the Medical Profession in Ireland, as well as the public in general, which, in these days of reform, I think you, as the editor of THE MEDICAL PRESS AND CIRCULAR, bearing in mind your motto—"Salus Populi"—might do good service in noticing.

I allude to the County Infirmaries of Ireland. On examining Churchill's Directory for this year, I find that, excluding Dublin and Cork, there are some thirty of these institutions, affording bed accommodation to nearly 1600 patients, and these 1600 sick people are cared for by thirty-six surgeons and physicians only. Indeed, but three county infirmaries—viz., Limerick, Kilkenny, and Westmeath—have more than one medical man attached to them. This state of things I consider unjust, not only to such as may require medical or surgical aid, but also

to the public and the Profession generally—unjust to the Profession because, whoever holds one of these appointments, holds also what may be called a monopoly of the surgery of his district, as nearly every surgical case of moment finds its way, almost as a matter of course, to the Infirmary; unjust to the public generally, because, if these appointments were not so exclusive, but distributed (as in England and Scotland) amongst the practitioners of the county town in which they are situated, the probability is that a greater number of medical men would be found in country districts, necessarily better qualified by daily routine to undertake any operation or surgical manœuvre; and unjust also to the patients who have to seek the assistance of these institutions, and who are obliged to trust in most instances to the judgment of one person alone, however skilful and competent he may be, instead of having the advantage of the advice of other medical men of the locality. Does not this state of things, sir, require redress? In English and Scotch counties they never dream of electing one gentleman alone to such a situation, chosen—as in this country he often is—not so much from his skill and acquirements as for strong local influence, giving him, too, a large salary, thereby diminishing funds which should be spent in charity — and in many instances assigning the best apartments in the house, which might be very much better applied in affording the inmates a greater cubic space to recover in. I would contrast such places as Londonderry and Antrim with Kilkenny and Westmeath, and I cannot see why the latter should appear to have a proper staff, while but one surgeon has charge of each of the infirmaries of the former. I would ask the county gentlemen—the subscribers and the members of committees of these charities all over Ireland—would not they and the public be gainers if in future, as vacancies occur, a proper staff be elected from the body of medical men of the county town in which these infirmaries are situated? I ask the profession at large, would there not be a better chance for the advancement of the science of surgery, if the practice of these institutions was not confined to one man only, who alone is responsible for his acts, and whose tendency, from the absence of that honourable emulation which characterises the great surgeons of our metropolitan hospitals, must be to relapse into slovenliness and carelessness? I ask you, sir, does not your experience as the conductor of Ireland's Medical Journal, bear me out in what I say?—for I appeal to you, if the literature of our profession has been enriched to the extent it might have been, considering the large field the incumbents of these hospitals have for their labours?

I hope I will not be misunderstood, or supposed to be reflecting in any way upon the abilities of any one of the gentlemen who hold the appointment of County Infirmary Surgeon, of the zeal with which they perform their duties, or of the efficiency of the hospitals under their charge—no one can have a higher respect for the Irish Infirmary Surgeon than I have. I make these remarks merely to suggest a mode by which this efficiency might be increased, more country surgeons made effective—and what I look on as an unfair monopoly removed.
—I am, &c. Mus Rusticus.

LONGFORD WORKHOUSE.

TO THE EDITOR OF THE MEDICAL PRESS AND CIRCULAR.

Sir,—Until Dr. Nichols, or some person for him, shows that the official returns which I lately published respecting the comparatively high mortality in the Longford Workhouse, and the comparative paucity of fever patients in it latterly, are incorrect, in any material respect, I shall not notice any observations that are made by that gentleman.

In reference to the resolution of the Board of Guardians, that the remarks which I made "are unfounded and uncalled for," I would, with great respect to them, observe that if the mortality of their workhouse has been, as I showed from official returns, comparatively high, and if fever patients were disinclined to enter the Workhouse Fever Hospital, my remarks were not "unfounded," and until they are shown to be "unfounded," I cannot consider them to be "uncalled for."

The Poor-Law Commissioners' Reports show that, in the ten years ended September, 1865, the number of fever patients treated in the Longford Workhouse was 631, and that of persons affected with other diseases, 4602, and that 541 died in it. Dr. Nichols informs us that not one of these 5233 got a glass of wine, of punch, or of ale, and that not one of the 4061 convalescents got an ounce of meat or a pint of soup! With every possible respect for the Board of Guardians, I am decidedly of opinion that many of the sick and of the convalescents are not done justice to under such treatment, and have no doubt that, outside the Longford Workhouse, there is not one medical man that differs from that opinion. Denis Phelan.

P.S.—Please to state that 172 in my last letter should have been 1½.

THE COUNCIL OF THE ROYAL COLLEGE OF SURGEONS IN IRELAND.

TO THE EDITOR OF THE MEDICAL PRESS AND CIRCULAR.

Sir,—As the editoral remarks which appeared under the above head in the last number of your Journal, seem calculated to lead to a misconception, I feel it due to myself to lay the following facts before the profession. Your statement that "*The outgoing Council had been replaced in the administration of the College, although, in addition to the Ex-Councillors, nine Fellows offered themselves to the Fellows for election,*" might lead to the impression that these nine Fellows sought for places on the Council by an attempt to unseat some of the out-going Councillors. On the part of myself, individually, I beg most strongly to disclaim any such intention.

In the unsettled state of the College representation, caused by the lamented and unexpected death of Dr. Banon, it appeared that there would be *three* or *four* vacancies on the Council; under these circumstances many valued and influential friends urged me to place my name on the list of candidates, and I do not think I can be accused of egotism if, on reflection, I considered that my standing in the profession as fairly entitled me to such a position as some of those who now enjoy that honour. During the three or four days which intervened between this occurrence and the election, Professor MacNamara withdrew his canvass for the Vice President's chair, and the report of Dr. Mackesy's intended resignation proving unfounded, thus left the probability of two vacancies only. One of these I regarded as vested in Mr. Butcher, should he desire to resume his place in the Council Chamber; still, as one vacancy remained, I felt bound to those who had kindly promised to support me, and accordingly I did not withdraw my name, although fully assured in my own mind that in the present state of parties in the College, I could not hope to be elected. Some zealous friends who knew how matters stood advised me to run against some one of the old members of Council, with a view to make a vacancy for myself, a stratagem which proved so successful at a former election in the College; this I declined to be a party to, as I would not care to accept a seat on the Council obtained by an electioneering manœuvre—which I regard as *undignified—discreditable* to him who resorts to it, and wholly unsuited to such a corporate body as our College of Surgeons. I cannot allow the opportunity to pass without returning my warmest thanks to the large body of independent Fellows who so kindly supported me on that occasion.—I remain very truly, yours,

Edward Hamilton.

120, Stephen's Green, 21st June, 1867.

WORKHOUSE HOSPITALS IN THE METROPOLIS.

The following are the heads of the new law affecting the management, &c., of the Workhouse Hospitals in the Metropolis:—

Meetings of the Board.—Articles 1 to 10. The first meeting is to be held on the 22d of June, at two o'clock, at the office of the Metropolitan Board of Works, to fix the time and place of future sittings. The meetings are to be held once a week at least; seven to be a quorum. The election of a chairman and vice-chairman is provided for, and also the supply of vacancies in those offices. An extraordinary meeting may be summoned at any time on the requisition of two members.

Proceedings of the Board.—Articles 11 to 15. Reports on the state of the several asylums are to be read and acted upon; books and accounts relating to relief to be presented and examined; orders on the proper authorities for such sums as may be required; committees may be appointed and powers delegated to them.

Contracts.—Articles 16 to 23 provide all the details necessary for the management of contracts and the supply of articles of consumption.

Orders for Contributions and Payments.—Articles 24 to 26 provide that every payment greater than £3 shall be made by an order drawn on the treasurer and signed by the chairman and two other managers.

Appointment of Officers.—Articles 27 to 30. Every officer is

to be appointed by a majority and reported immediately to the Poor-law Board. Due notice of intended appointments is to be advertised. The clerk and treasurer are to be appointed within sixty days of the first meeting.

Salaries.—Articles 31 to 35 provides for the payment of salaries, both regular and exceptional.

Security.—Articles 36 to 41. The clerk, treasurer, and other officers to give security.

Suspension of Officers and Supply of Vacancies.—Articles 42 to 56 contain provisions upon these subjects.

Duties of Officers.—Articles 49 to 52 prescribe in great detail the duties of the clerk and treasurer.

The remaining articles are of little importance.

Medical News.

SCIENCE AND ART AT SOUTH KENSINGTON.—This is, unfortunately, an age of smattering. The so-called intellectual classes, like the Athenians of old, are restless, and always seeking after "some new thing." A stranger, passing through our great city, would see in its south-west quarter, as an apostle once saw in ancient Athens, "an altar to an unknown god"—an altar whereon all that is true and sound in science and art education is being sacrificed to a fatal whim which fosters a miserable craving after superficial knowledge. —*The Laboratory.*

EXAMINATION IN ARTS.—During the present week the authorities of the Royal College of Preceptors have been busily engaged conducting the preliminary examinations in Arts, &c., at the College of Surgeons for the Fellowship and Membership of the latter body, and it is stated that nearly 140 candidates have offered themselves.

DEATH OF M. CIVIALE.—This celebrated French surgeon died on the 13th instant, almost suddenly, in the 75th year of his age. His writings on the diseases of the urinary organs are universally known, especially on lithotrity, which he was the first to perform on the living person. All his celebrity was due to hard work, and he continued working until the last, for he was just printing a "Guide for the Operations of Lithotrity and Lithotomy."

THE presentation of the testimonial to the proprietors of the *Pall-mall Gazette*, which was arranged to come off at Mr. Hill's, 45, Queen Anne-street, Cavendish-square, has been postponed from Tuesday, June 25th, to Wednesday, June 26th, at five o'clock.

A VACANCY for an Assistant-Physician at the Consumption Hospital, Brompton, is about to occur. The election is in the hands of the Committee of Management, and the office may be held in conjunction with another hospital appointment.

DR. WOOD (LL.D.) and Mr. Walter Bagshot, M.A., are the candidates put prominently forward by the Liberal party to represent the University of London in Parliament.

POISONOUS PILGRIMS.—It was recently stated by one of our contemporaries that the Hurdwar pilgrims, notwithstanding all the efforts to prevent them, entered the bazaar at Umballa, in India, and had not only infected some of the native population with cholera, but had actually communicated the disease to some of the men of H.M.'s 94th Regiment. A Trieste telegram confirms this intelligence. The cholera still prevails at Umballa, and is, we regret to say, on the increase. The 94th Regiment has lost twenty-one men, and the native population in the surrounding villages is being cut down in large numbers. Surely there is neither principle, policy, nor prudence in the religious toleration which brings us such results as these!

PHARMACEUTICAL SOCIETY OF GREAT BRITAIN, June 19th, 1867.—Names of Candidates who passed the Major Examination as Pharmaceutical Chemists—Joseph Bemrose, Liverpool; Charles Eve, London; George Harrison, Sheffield; Edward Jackson Ireland, Egremont, Cumberland; Henry Rayson, Lincoln; Joseph Severs, Leeds; Ralph Walton, Sunderland; Hermann Woolley, Manchester; John Robert Wretts, Ipswick.

THE QUEEN'S UNIVERSITY IN IRELAND.—The vexed question as to the validity of the Supplemental Charter, whereby the institution known as the Catholic University, the Magee College, and other educational establishments were affiliated to the Queen's University in Ireland, seems to have been practically set at rest. The original petition filed by certain graduates of the University to nullify the Supplemental Charter was dismissed by the Master of the Rolls on a point of form—viz., that it should have been brought forward as an information by the Attorney-General. His Honour intimated that he agreed with the petitioners on the main question. They were, therefore, encouraged to ask the Attorney-General for his assent to the petition, which having been granted, the case came again before the Rolls Court on the 13th instant. Dr. Ball, counsel for the petitioners, applied for the usual *ad interim* injunction to restrain the Senate of the University from acting upon the Supplemental Charter until the hearing of the suit. Mr. Lawson then rose, and stated that although not instructed to appear on that motion, he had authority to say that the Vice-Chancellor and the members of the Senate would not oppose the suit, as it had been instituted by the Attorney-General in the discharge of his public duty. Under these circumstances, the Court did not consider that it was necessary to issue an injunction, and ordered the motion to stand over until the hearing of the cause. When the matter comes before the Court for final decision, we presume the Master of the Rolls will adhere to the opinion he has already expressed, and decide against the validity of the Charter. The original character of the Queen's University will, therefore, be preserved intact, unless Parliament should think fit to alter it, which is a contingency not to be anticipated.—*Saunders's News Letter.*

ROYAL COLLEGE OF VETERINARY SURGEONS, London.—At a special meeting of the Council, convened for the purpose of electing a president, two gentlemen were nominated. Mr. William Field, jun., of Oxford-street, was proposed by the principal veterinary surgeon to the army, Mr. Wilkinson; and Mr. F. Cowie by Professor Spooner. The result of the ballot being declared in favour of the first gentleman, he was declared duly elected, and took office accordingly. Mr. Field, we are informed, is the youngest president of this institution on record.

A WELL-ATTENDED conversazione was given by the professors of University College, London on Wednesday evening last. A selection of vocal and instumental music, the exhibition of microscopes, and other scientific instruments, in addition to the ordinary attractions of the College, entertained the numerous visitors, among whom were Sir John Lowring and Mr. Bright, M.P., until a late hour.

DR. JORDAN.—This notorious individual has withdrawn the notice of appeal, and paid the penalties inflicted on him by the magistrate at Marlborough-street, amounting to £20 and costs, in the case of the London College of Surgeons and also in that of the Edinburgh College of Physicians. The penalties will go to the General Medical Council, but no doubt will be returned to the respective institutions which so successfully prosecuted the delinquent who so outrages public decency. A writer in the *Pall-mall Gazette* on "How to Deal with Indecent Quacks," states that on receiving one of Jordan's productions, he called on the fellow, returned him his pamphlet, remained with him for a few minutes, and left him apparently suffering from "nervous exhaustion," and recommends other men who are "annoyed by his abominations to pay him a visit after the receipt of the next pamphlet, and leave him in the same abject state."

SERIOUS, IF TRUE.—A telegram, published in the *Levant Herald*, conveys the grave intelligence of an outbreak of what is believed to be Asiatic plague at Kerbilah, on the Euphrates. The symptoms seem to point to a modified typhus, but whether this be so or not the malady is certainly a grave one, since it has already carried off 20 per cent. of the population. It has been ascertained to be in part the consequence of the foul miasma following the late floods, and partly the result of the condition of filth and squalor in which the people live. The authorities at Bagdad have taken every precaution to prevent the extension of the pest, and the Galata Board of Health have addressed an urgent request to the Porte that the strictest measures of quarantine may be put in force.

NOTICES TO CORRESPONDENTS.

Communications to the London Editor should be addressed to 20, King William-street, Strand; to the Edinburgh Editor, at Maclachlan. and Stewart's, South Bridge; and to the Dublin Editor, at 3, Lincoln-place.

All Contributions are attentively considered, and unaccepted MSS. are returned on receipt of stamps for postage; but the Editors cannot be responsible for any accidental loss, nor can MSS. or replies be delivered on personal application.

Contributions should be *legibly* written, and only on one side of the paper.

When proofs are forwarded it is of the utmost importance that they should be corrected and returned without delay.

BOOKS AND PAMPHLETS RECEIVED.

Report of Committee of the Manchester Statistical Society, on Registration of Deaths.

The Elements of Natural Philosophy. By Charles Brooke, M.A., F.R.S., P.R.M.S. London: John Churchill and Sons.

Hospitals, Infirmaries, and Dispensaries: their construction, management, &c. By F. Oppert, M.D., L.R.C.P.L. London: John Churchill and Sons.

Observations on Medical Education. By Hughes Bennett, M.D. F.R.S.E. Edinburgh: Adam and Charles Black.

The Prescriber's Companion. By Alfred Meadows, M.D.Lond. Second edition. London: Henry Renshaw, 356, Strand.

Practical Observations on the Harrogate Mineral Waters. By Andrew Scott Myrtle, M.D., L.R.C.S.E. London: John Churchill and Sons.

Journal de Medicine for June.

The Mixture Book, including Quack Medicines. By Arnold J. Cooley. London: Hardwicke, Piccadilly.

Introductory Address at the Public Opinion of the Medical Session 1866-67. By W. T. Gairdner, M.D.

The Hunterian Oration for 1867. By John Hilton, F.R.S. London: Bell and Daldy, Covent Garden.

The New York Medical Journal for May.

Syphilitic Affections of the Nervous System. By Thomas Reade, M.D., T.C.D., &c.

Germinal Matter and the Contact Theory. By James Morris, M.D. Lond.

Clinical Lectures on the Diseases of the Skin, Nos. 1 and 2. Illustrated by coloured photographs. By Balmanno Squire, M.B.F.L.S. London: John Churchill and Sons, Burlington-street.

The State of the Medical Profession Further Exemplified. By Edwin Lee, M.D. London: W. J. Johnson, Fleet-street.

The London Surgical Home. By John Scoffern, M.B.Lond.

The Threefold Nature of Health and Disease. By Ed. Haughton, A.B., M.D., M.R.C.S.E.

The Theory of Vital Force Applied to the Cure of Disease. By E. Haughton, A.B., M.D., &c.

Meteorological Observations on the Humidity of the Air of Scarboro'. By Cornelius B. Fox, M.D. London: Simpkin, Marshall and Co.

On Pain and other Symptoms connected with the Disease called Hysteria. By Denis De Berdt Hovell, F.R.C.S.E. London: John Churchill and Sons.

MEDICAL APPOINTMENTS.

Anderson, C. L., L.R.C.P.Ed., House-Surgeon to the North Dispensary, Liverpool, has been transferred to the South Dispensary, vice T. Carson, L.R.C.S.I., resigned.

Buckley, Dr., has been appointed Resident House-Surgeon to the North Dispensary, Liverpool, vice C. L. Anderson, L.R.C.P.Ed., transferred to the South Dispensary.

Carter, A. E., L.R.C.P.Ed., has been appointed Assistant Medical Officer to the Toxeth-park Township Workhouse, Liverpool.

Crockett, Mr., has been appointed an Assistant House-Surgeon to the North Dispensary, Liverpool.

Foster, Mr. G. F. C., has been appointed Assistant House-Surgeon to the Halifax Infirmary and Dispensary, vice Hoadley, resigned.

Kego, Mr., has been appointed Assistant House-Surgeon to the South Dispensary, Liverpool, vice D. W. Telford, L.R.C.S.Ed., resigned.

Macpherson, S. H., L.F.P. & S. Glas., L.M., has been appointed Medical Officer for the 1st South-Eastern District of the Freebridge, Lynn Union, vice J. Headley, deceased.

Morgan, J. E., M.D., M.A., has been appointed Consulting Physician to the Salford Royal Hospital and Dispensary.

Orell, G., M.R.C.S., L.S.A., has been appointed Certifying Factory Surgeon for the Over and Winsford District, Cheshire.

Patterson, Mr., has been appointed an Assistant House-Surgeon to the North Dispensary, Liverpool.

Spanton, W. D., M.R.C.S.E., has been appointed Medical Officer to the North Staffordshire Infirmary, Etruria, vice G. Barnes, L.R.C.P.Ed., resigned.

Baumler, C., M.D., has been appointed a Junior Assistant-Physician to the City of London Hospital for Disease of the Chest, Victoria-park.

Richardson, B. W., M.D., has been appointed Physician to the St. Marylebone General Dispensary, Welbeck-street, vice W. F. Chorley, M.B., resigned.

Maclean, A., M.D., has been appointed Surgeon to the Muirkirk Iron Works, Ayrshire, vice S. H. Munro, M.D., appointed Medical Officer to the Nantwich District and Workhouse of the Nantwich Union, Cheshire.

M'Nab, J., M.D., L.R.C.S.Ed., has been appointed Medical Officer and Public Vaccinator for the Parish of Arsynt, and Physician to his Grace the Duke of Sutherland's Household at Lochinver, Sutherlandshire.

Wyllie, Dr., has been elected Medical Officer for the Gourock District. Inverkip, Renfrewshire, vice Dr. Millar, resigned.

Manley, Dr., has been elected Medical Officer for the Shankhill Dispensary District of the Belfast Union, vice J. M'Mechan, M.D., deceased.

Births, Marriages, and Deaths.

Announcements are inserted without charge, and must in all cases be authenticated with the signature of the sender.

BIRTHS.

Leach.—On the 10th inst., at Sturminster Newton, Dorset, the wife of J. Comyns Leach, B.Sc., M.R.C.S., of a son.

Edis.—On the 13th inst., at Barton-street, Gloucester, the wife of T. Edis, M.R.C.S.E., of a son.

Bullock.—On the 13th inst., at Spring-grove, Isleworth, the wife of Henry Bullock, F.R.C.S.E., of a daughter.

Rogers.—On the 13th inst., the wife of J. Rogers, M.R.C.S.E., of Pagefield House, Swansea, of a son.

More.—On the 14th inst., at Rothwell, Northamptonshire, the wife of Dr. More, of a son.

Hewan.—On the 15th inst., at Mincra-street, Eaton-square, the wife of A. Hewan, M.D., of a daughter.

Spurgin.—On the 18th inst.; at Tichmouth Villa, New-road, Hammersmith, the wife of Frederick W. Spurgin, M.R.C.S., of a daughter.

MARRIAGE.

Macnab—Smith.—On the 13th inst., at Bury St. Edmunds, Robert Macnab, M.D., to Frances Ann, daughter of C. C. Smith, Esq.

DEATHS.

Gradwell.—On the 5th inst., at Lytham, Lancashire, W. Gradwell, M.R.C.S., L.R.C.P.Ed., aged 61.

Woolmer.—On the 6th inst., at Bristol, Shirley E. Woolmer, M.R.C.S., aged 37.

Ellis.—On the 9th inst., at Brighton, Henry Ellis, M.R.C.S.E., of Rickinghall, Suffolk.

Johnston.—On the 11th inst., on Westbourne-park-road, Bayswater, Thomas Glen Johnston, M.D., Surgeon-Major Madras Army, aged 55.

Helm.—On the 15th inst., at Rugby, Mary Elizabeth, wife of George F. Helm, M.A., F.R.C.S., aged 25.

Smith.—On the 16th inst., at Cromwell-street, Stornoway, John Smith, M.D.

Advertisements.

NOTICE TO ADVERTISERS.

The Medical Press and Circular

OFFERS UNUSUAL ADVANTAGES

FOR the Insertion of announcements from its extensive and largely increasing circulation in each of the three divisions of the United Kingdom and the Colonies. Being also supplied to the Hospital Libraries, &c., it will be found a most valuable medium for Advertisements of Books, Vacancies and Appointments, Sales, and Transfers of Practices, Surgical Instruments, Chemicals, and Trades generally.

The scale of charges is as follows:—

Seven lines and under	£0	3s.	6d.
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One-quarter page	1	0s.	0d.
Half ,,	1	15s.	0d.
One ,,	3	0s.	0d.

The average of words per line is twelve.

When advertisements are given for a series of insertions, a very considerable reduction from the above scale is made.

☞ Advertisements for Insertion in this Journal must be at the Office, 3, Lincoln-place, Dublin, on Monday, by Three o'Clock.

INDIAN MEDICAL SERVICE.

India Office, S.W., 12th June, 1867.

NOTICE IS HEREBY GIVEN, that an Examination of Candidates for Twelve Appointments as Assistant-Surgeons in Her Majesty's Indian Medical Service, will be held at Chelsea Hospital, on the 12th August, 1867.

Copies of the regulations for the Examination of Candidates, together with information regarding the Pay and Retiring Allowances of Indian Medical Officers, may be obtained on application at the Military Department, India Office, Westminster, S.W.

T. T. PEARS, Major-General,
Military Secretary.

LONDON NURSES' INSTITUTE,

42, South Audley-street, Grosvenor-square, W.

TRAINED NURSES (Medical, Surgical, Mental, and Monthly), can at all times be obtained from this Institute.

Hospital Appointments by special arrangement.

Letters and Telegrams should convey the nature of the case to be attended.

Apply to the Manager or Matron. T. HAMILTON, Manager.

SUPPLEMENT

TO

The Medical Press & Circular.

ABSTRACT OF REPORTS

ON THE

LATE EPIDEMIC OF CHOLERA,

AS IT OCCURRED IN THE

Hospitals of Dublin.

LAID BEFORE THE MEETINGS OF THE

Medical Association of the King and Queen's College of Physicians, Ireland,

HELD ON THE

27TH OF MARCH AND 4TH OF APRIL, 1867.

ABSTRACT OF REPORTS ON THE LATE EPIDEMIC OF CHOLERA.

MEATH HOSPITAL.

SHORT ABSTRACT OF FACTS CONNECTED WITH THE EPIDEMIC OF CHOLERA.

By GEORGE ROE CARTER,

LATE RESIDENT PUPIL.

(On the part of himself and other Assistants.)

1. *Time occupied.*—The first patient was admitted on the 8th of August into the cholera wards of the Meath Hospital, between which date and the 14th of October, 116 patients were admitted, all of whom were under the supervision of Dr. Hudson. An interval of about six weeks occurred between the closing of the wards on the 20th of October, and opening of the sheds, which were opened on the 1st of December, and closed on the 28th of the same month; during that time fourteen cases were admitted into the sheds, and were treated according to Dr. Stokes' directions.

2. *Accommodation provided.*—The wards of the Meath Hospital for the reception of such cases were first opened under very unfavourable circumstances, which, no doubt, is well known to a great number of the profession, inasmuch as they were quite inadequate in size, situation, ventilation, and other common necessaries, which are of such vital importance, not only for the welfare of the patients, but even for the attendants.

The cubic space of the wards are as follows:—

Female ward, 3432 feet; male ward, 4302; they contained six beds each, which only allows 572 cubic feet for each female patient, and 717 for each male, giving an average of 644½ cubic feet for each, without any current of air. The sheds which were erected are in every respect well adapted for the requirements of such patients.

3. *Stage of disease on admission.*—Out of the 116 cases admitted into the above named wards which were treated by Dr. Hudson—five were in the premonitory stage; 108 in collapse or approaching it, and three in consecutive fever; of the 14 cases which were admitted into the sheds and treated by Dr. Stokes, three were in the premonitory stage, nine in collapse or approaching it, and two in consecutive fever.

4. *Mortality at different periods and different ages.*—From the 8th August to the 1st of September the mortality was 48·9 per cent., and from the latter date to the 20th October raised to 54·5 (the increase of which we consider was due to the overcrowding of the wards), and to the condition of the patients on admission, as the earlier cases were more amenable to treatment, while, as the epidemic advanced, the disease assumed a more malignant tpye, which was probably aggravated by the crowding in our small wards. In December, on opening our large and airy sheds, it went down again to 42·8 per cent., averaging on the whole 51·5 per cent. Over twenty of those patients died within five hours after admission, some in a quarter of an hour, others in from half an hour to two hours. The mortality in children and adults was much under that of the aged, and particularly those whose constitution had been broken down by dissipation, few, if any of them, recovered.

5. *Modes of treatment pursued, varied according to the stage, as follows:*—

(*a.*) In premonitory diarrhœa and early stage, in two cases castor oil was given, but with discouraging results. Acetate of lead with small quantity of opium, sulphuric acid, and chalk mixture, with kino and catechu succeeded in a number of instances; the vomiting was checked in some cases by freshly prepared charcoal, in a few by bisulphite of soda, but with most effect by creasote and acetic acid, which was subsequently prescribed by Dr. Stokes. We also found a solution of camphor and chloroform useful in cramps of the stomach, particularly so when combined with capsicum, and the inhalation of chloroform most effectual in allaying cramps in some bad cases; in addition to those internal remedies, hot stupes of mustard and turpentine were applied, and friction of the surface and extremities with the hands, flannel bandages being applied after friction. Brandy was given freely, and ice *ad libitum*, the latter of which was of much use in allaying thirst and checking vomiting.

(*b.*) In collapse or approaching it, the patient was enveloped in a blanket wrung out of hot water and mustard, and sprinkled with turpentine, over which a number of dry ones were put, removed when it got cool, and repeated if necessary; this we found to be most efficacious in rousing the patient and raising the temperature of the body, after which mode of packing the radial pulse, which was before it imperceptible, invariably returned, and the patient expressed himself as being much better. We have also tried, with some advantage, Sir Dr. Corrigan's button-shaped cautery, heated by boiling water and applied over the vagus, and on either side of the spine, which would arouse the patient greatly for the time, though he frequently relapsed into his former condition. In addition to those external applications, calomel and bismuth from gr. ¼ to ½ gr. of the former, to gr. v. of the latter were given every hour, until the secretion of bile and urine was restored; the dose of calomel was subsequently increased (to gr. v. followed by one grain every hour) by Dr. Stokes, also with good results; camphor and chloroform, and the inhalation of chloroform were also employed in this stage of the disease for the relief of cramps. At the suggestion of Dr. White tinct. of canabis indica was extensively tried (in 20 to 30 drop doses) as a stimulant, in some cases with apparent benefit; brandy was freely given also in this stage of the disease. Seven cases were treated by calabar-bean at the repuest of Dr. Mapother, which Dr. Mapother reported in THE MEDICAL PRESS AND CIRCULAR of the 12th of September; in these seven cases three proved fatal, and with one or two of those who survived we were obliged to discontinue the use of the drug, and put them on calomel, on which treatment they speedily recovered. In some of those cases it produced dysenteric stools, and contraction of the pupil with the cornea slightly injected. (As the number of cases treated by the drug were insufficient to test its value in this disease, we cannot either condemn or recommend its use, but we are of opinion that the results from its more extensive trial would not have been so favourable as those of the calomel treatment). Two cases were treated by Dr. Stokes, by the injection of salines into the veins which proved fatal, (but as they were previously treated by calomel, and the number not sufficient to test its value, we cannot say anything in favour of it or otherwise).

Stage of suppression of urine, and consecutive fever.—(*c.*) For suppression of urine the patient was cupped over the lumbar region, and 3 or 4 ℥ removed, after which a hot bran poultice was applied to the foot, and diuretics administered. In several instances the cupping was repeated with great advantage, and we have succeeded (in bringing on the flow of urine in a good many cases, when complete suppression of that secretion had existed for over 48 hours, and even from patients who were far advanced in uremia) by those measures; calomel and bismuth was also given in this stage of the disease as before, but stimulants were not administered so freely. In the consecutive fever, if the evacuations from the bowels were bilious and copious, the calomel was either discontinued altogether or given in small doses at long intervals; if the pulse was strong and regular, tongue moist and rather clean, no gastric irritation or delirium, the patient got a moderate quantity of brandy or wine, chicken broth or weak beef-tea, bread and milk or tea and ice *ad libitum*. In the advanced stage of uremia,

when head symptoms were present, the characteristic odour from the patient with complete suppression of urine, we have seen the best results follow, repeated cupping over the loins with the administration of diuretics, the shaving of the head and blistering the nape of the neck, and from the application of leeches to each mastoid process, with a calomel and rhubarb purge when there was no motion of the bowels for a few days. Such were the modes of treatment adopted during the late epidemic by Dr. Stokes and Hudson, and if time or space would admit, we could bring forward a number of important cases which were successfully treated. During the whole epidemic only two cases occurred in the hospital, which was in the interval when no cholera cases were in the wards, or had been for ten days previous. One of those patients was convalescent from typhoid, and died in nine hours illness, the other was in the thirteenth day of typhus, with high nervous symptoms, and died in about twelve hours illness. The night nurse and washerwoman attending on the cholera wards were attacked; the former made a wonderful recovery, but the latter died in less than twenty-four hours illness. We also had a case associated with pregnancy, who was admitted in a very precarious state, the woman was six months pregnant. The treatment as in other cases was adopted, and the patient left hospital perfectly well, without any sign of abortion.

HOUSE OF INDUSTRY HOSPITAL.

SUMMARY REPORT ON THE CASES OF CHOLERA ADMITTED TO THE HARDWICKE HOSPITAL 1866.

Collated by Mr. J. ADAMS CLARKE, Clinical Clerk.

Edited by Dr. LYONS.

DURING this epidemic, a total of 277 cases were admitted into the cholera wards, and no case of cholera was refused admission; several were admitted which had failed to procure admission elsewhere. From these cases were rigidly excluded, by the Clinical Physicians, all instances of vomiting and purging, with or without cramps, which did not strictly correspond to the type of true Asiatic cholera. There were thus recorded of

True cholera	.	193	cases,	of	whom	128 died.
Diarrhœa	.	68	„	„	„	1 „
Vomiting and cramps		16	„	„	„	None „
		277				129

Of diarrhœa, including choleraic diarrhœa, 68 cases were admitted, of which the first was taken in on June 25th, and the last on December 3rd. Occurring during the prevalence of a cholera epidemic, these cases, it is highly probable, belonged to the epidemic constitution then prevailing; only 1 case proved fatal. It occurred in the person of a man, aged 45, who was admitted on the 6th of August, and died on the 10th. Prior to the 25th June no case of diarrhœa had been admitted into the Hardwicke Hospital for a period of six months.

Cholera.—Of undoubted cases of true cholera 193 were admitted, of whom 128 died. The first case occurred in the person of a girl aged 7 (Susan Carleton), who was admitted on the 22nd of August; she had lived in Church-street, 127; she died on the 23rd of August. The last case of death from cholera occurred on the 5th December, 1866; but the last case of cholera disposed of in hospital was discharged cured on the 28th December, 1866.

The following table exhibits the actual number of cholera cases by sexes and ages :—

ADMISSIONS BY AGES.	Under 5	10	20	40	50	60	Over 60	Total	Deaths.
Males...	7	9	17	26	11	3	7	80	48
Females	6	9	19	41	12	13	13	113	80
Totals	13	18	36	67	23	16	20	193	128

Last case discharged cured 28th December, 1866.

The largest number of admissions occurred during week ending 27th October—11 males, 12 females; total, 23.

The largest number of deaths during the same week (27th Oct.)—4 males, 11 females; total, 15.

The geographical distribution of the above cases was as follows :—

From N. side of Dublin,	85,	*i.e.*, north of the Liffey.
From S. „ „	105,	*i.e.*, south of the Liffey.
From Arklow, Wicklow, (Dublin Bay),	1	
From Kingstown, co. Dublin,	1	
From Westport, co. Mayo	1	(Guard in M. G. W. Railway got ill on way).
Total,	193	

The admissions per month were as follows :—

	July.	Aug.	Sept.	Oct.	Nov.	Dec.
Males ...	1	10_3	21_{14}	24_{15}	21_{13}	3_1
Females...		11_6	24_{14}	39_{29}	33_{24}	6_4
Totals...	1	$21_{(14)}$	$45_{(28)}$	$63_{(44)}$	$54_{(37)}$	$9_{(5)}$

Total, 193. (Deaths, 128.)

N.B.—The small figures indicate the deaths.

Diarrhœa, including choleraic diarrhœa—Total, 68, including 1 death.

First case admitted June 25th.
Last „ „ Dec. 3rd.

The next table exhibits the mortality for sexes and ages respectively :—

DEATHS FOR AGES	Under 5	10	20	40	50	60	Over 60	Total.
Males ...	4	6	8	15	10	2	... 7	... 52
Females	4	7	7	25	11	10	... 12	... 76

The excessive mortality of females of the ages of 40, 60, and upwards at once strikes the eye.

In the subjoined table will be found the percentage mortality of the sexes, ages, and for the months of the epidemic:—

TABLE OF PERCENTAGE MORTALITY.

The percentage mortality in the total of true cholera cases was ...	66·3	per cent.
For males the mortality was ...	60·	„
For females „ „ ..	70·8	„

FOR THE SEVERAL MONTHS THE PERCENTAGE MORTALITY WAS :

Aug.	Sept.	Oct.	Nov.	Dec.
66·6	62·2	69·84	68·5	55·5

FOR THE SEVERAL AGES AND SEXES THE PERCENTAGE MORTALITY WAS :

DEATHS FOR AGES	Under 5	10	20	40	50	60	Over 60
Males	57·14	66·6	47·	57·69	90·9	66·6	100·
Females	66·6	77·8	36·4	60·9	91·66	76·9	92·3

Subjoined is a tabular view of the duration of the fatal cases in hours prior to their admission to hospital :—

FATAL CASES—DURATION OF DISEASE BEFORE ADMISSION TO HOSPITAL.

Admitted Dead.	Under 1 hour.	Under 2 hours.	Under 3 hours.	Under 6 hours.	Under 12 hours.	Under 24 hours.	Under 48 hours.	Under 72 hours.	Under 96 hours.	Under 5 days.	Over 5 days.	Not known.
1	2	3	3	16	38	22	12	5	7	5	8	6

The next Summary shews the duration in hours of the fatal cases in Hospital :—

FATAL CASES—DURATION OF DISEASE IN HOSPITAL.

Brought in dead.	Under 1 hour	1 2 hours	Under 3 hours	6 hours	Under 12 hours.	Under 24 hours.	Under 36 hours.	Under 48 hours.	Under 72 hours.	Under 96 hours.	Under 10 days.
1	1	2	2	6	28	50	3	13	7	4	10

90 died within 24 hours.

16 died within 48 hours.

Total 128 deaths.

We annex a summary of the results of various plans of Treatment by :—

		Deaths.	Recoveries.
,,	Emetics ...	—	—
,,	Purgatives ...	—	2
,,	Astringents { lead and opium	—	—
	{ catechu, &c.	15	18
	{ chalk, &c.	—	—
,,	Calomel ...	31	16
	By stimulants { chl. ether, sp. am.	40	13
	{ brandy, &c.	—	—
	Without stimulants ...	—	1
	By special treatment as white of egg ...	8	2
,,	Calabar bean ...	—	1
,,	Camphor and chloroform	11	3
,,	Camphor, capsicum, and creasote	8	4
,,	Warm bath ...	—	1
,,	With milk	—	—
,,	Diuretics ...	—	1
	No entry ...	13	13
	Permanganate of potash	1	—
	Ice, brandy, &c. ...	1	—
	Total	128	75

The following is a brief summary of the post-mortem appearances :—

General Summary of Post-mortem Appearances.

1. Body generally—Rigor well-marked ; lividity diminished ; temperature raised, as compared with that before death.
2. Brain—Healthy.
3. Spinal chord—Healthy.
4. Ganglionic centres (solar plexus and semilunar ganglia) —Healthy.
5. Blood—Thick and tarry.
6. Heart—Right chambers loaded ; pulmonary artery contained coagulum.
7. Lungs—Occasional congestion; no constant condition.
8. Stomach—A washed appearance ; but varied with ingesta, taken in before death.
9. Intestines—A general washed appearance ; pale pink colour ; sago-grain appearance of minute glands.
10. Liver—No marked appearance noticeable.
11. Spleen—No special characters.
12. Kidneys—Rather bloodless ; and in cases of prolonged life with uræmia, some congestion with infarction of tubules.

There were 26 persons, 4 males, and 22 females employed in the Hardwicke Hospital during the cholera period ; 4 nurses and 2 ward-maids were in constant attendance on the cholera patients ; all the others were in close proximity and frequently assisted in carrying in patients, &c.; 5, exclusive of the laundry-superintendent, were constantly engaged in washing the clothes of the cholera patients ; of all them but 1, a laundry-maid, took cholera, and she died of it. She was some hours ill with cholera in the sleeping room of the laundry-maids, who were all in close attendance upon her; 4 physicians, 4 clinical clerks, 2 temporary do., and a class averaging 20 per day were in daily attendance ; 1 clinical clerk (Mr. Henry) exhibited cholera, but recovered. In all—4 physicians; 4 clinical clerks; 3 temporary do.; 1 steward and paymaster; 1 registrar and accountant; 20 pupils (at a minimum) ; 26 domestics and superintendents ; 1 diet clerk;—Total 60.

These persons were exposed to the full influence of the disease, of whom 2 only exhibited it, and 1 of whom only died.

The cholera wards of the Hardwicke Hospital are two of the ordinary fever wards ; they are under the same roof as the other wards, and all the wards open upon a common well-stair-case and central hall, and it is impossible to conceive that in changing and varying winds admixture of the atmosphere of the cholera wards with that of the other wards did not frequently take place.

The fever wards were occupied by ordinary cases during the cholera period to the total number of 428; of these five patients only exhibited cholera.

I. FEVER PATIENTS IN HARDWICKE DURING CHOLERA EPIDEMIC, FROM JULY 26TH TO DECEMBER 16TH, 1866.

July	26th to	31st	10 patients.
August	1st ,,	31st	92 ,,
Sept.	1st ,,	30th	81 ,,
Oct.	1st ,,	31st	107 ,,
Nov.	1st ,,	30th	67 ,,
Dec.	1st ,,	28th*	71 ,,

Total 428 patients.

This total number of 428 includes simple typhus and typhoid fever, small-pox, scarlatina, and measles.

II. FEVER PATIENTS WHO TOOK CHOLERA IN THE HOUSE.

1. *Edward Corcoran*, admitted with fever 26th July ; got cholera August 30, 1866.
2. *Thomas Berry*, admitted with fever 28th August ; got cholera.
3. *Ellen Brennan*, admitted with fever 9th October ; got cholera.
4. *Mary McMahon*, admitted with fever 10th October ; got cholera.
5. *Margaret Leary*, admitted with fever 20th October; got cholera.

} Died.

Summary.—Total fever, &c., cases in Hardwicke during the period commencing July 26, and ending December 28 428

Total number of these cases that took cholera during this period 5

It will thus be seen that of a total of 60 persons in the establishment, and 428 patients in the Institution, in all 488, only 7 exhibited cholera, being in the proportion of 1·43 per cent.

Five cases of cerebro-spinal arachnitis occurred in the sequela of cholera. In no single case was true cholera typhoid developed as a sequel of cholera.

* The last cholera patient was discharged cured December 28, 1866.

MOUNTJOY MALE GOVERNMENT PRISON.

REPORT ON THE CHOLERA OUTBREAK AT THE CLOSE OF THE YEAR 1866.

A DETAILED account of the circumstances connected with this outbreak will, I conceive, have considerable interest in the eyes of medical men.

The facts have a scientific value on account of the neatness, precision, and accuracy with which they can be ascertained within the walls of such an institution as a prison. Let me state, that I do not myself advocate any theory on the subject of the propagation of malignant cholera. I do not doubt that the disease is capable of being communicated from the sick to the healthy; but it appears to be equally certain that there are cases where malignant cholera cannot be logically traced to this origin. I shall confine myself to a simple statement of facts.

The Mountjoy Prison stands in a salubrious situation. Since it was opened for the reception of prisoners in the year 1850, the health of the convicts received into it has been such as to contrast favourably with other similar institutions. There has never been any prevalence of diseases such as arise from imperfect sewerage; it is built on a heavy blue clay soil, and on a sloping ground, so that within the prison walls there is a fall of twenty feet from the upper to the lower part. There is a well of water (not used for the supply of the prison) about the centre of the grounds; this well is ninety-five feet deep, and the water is tolerably strongly chalybeate. The prison is built upon what is known as the Pentonville plan, that is four arms radiating from a centre. Each of these arms is known as a division (A, B, C, D divisions), and consists of corridors with cells on each side. There are three tiers of cells, one over the other. There are basement stories under each division except A. These basements contain store-rooms and work-shops, but no cells. Each cell contains a little over eight hundred cubic feet of space, and there is an arrangement for ventilation (independently of the window), similar to that in Pentonville prison, where it is calculated that the air is renewed at the rate of about two thousand cubic feet per hour.

There is water-closet in every cell, well trapped and supplied with an abundance of water. At the lowest extreme of the prison grounds there are three large underground sewage tanks in which the more solid part of the sewage accumulates, and is used from time to time as manure; the liquid sewage flows off by a large sewer.

The canal of the north side of the city of Dublin has two branches in the angle between which the prison stands, the water in these branches is on a higher level than the ground on which the prison is built.

During the early part of December, 1866, the health of the prisoners was as good as it had been at any time for ten years before. On Saturday, December 22nd, 1866, there were 288 prisoners in the prison, (145 convicts, and 143 untried political prisoners), there were only five sick in hospital. On the forenoon of Sunday the 23rd December, five cases of malignant cholera occurred, of which three died before many hours. On the 26th two other cases were admitted to hospital, and on the 27th two more—of these one died; no case has occurred since then. In all there were nine cases of malignant cholera, of which four died. Upon the day following the first appearance of cholera, sixty-four cases of diarrhœa were reported,* and placed under treatment—twenty-one convicts, forty-three among the untried political prisoners.

As to the introduction of this disease from without by the warders or prison officers, the following are the facts:—

No one of the warders or other officers had had cholera, neither had there existed any cholera among their families.

Mr. Ward the resident apothecary had not seen any case of cholera for years. I had not myself been in contact with a case of cholera since the beginning of October (nearly three months before.)

* Immediately on the first appearance of the disease each warder in the prison was directed to go round each prisoner in his charge, and enquire whether he was suffering from any bowel attack; 64 cases were returned by the warders, and at once placed under treatment.
The outbreak commenced and terminated within a week. The nine cases of cholera all presented symptoms of collapse; in one case only were the cramps severe, in all there was the usual vomiting, purging, cold-blue extremities, husky voice, sunken eye, thirst, cold tongue and breath, &c.

The prisoners attacked were not in communication with each other, or with the same warders. In short, I have been wholly unable to trace this outbreak to any communication between the sick and healthy. None of the warders, officers, or prisoners who were in attendance on those ill of cholera took the disease. It has been surmised that the disease may have been propagated from the Mater Miserecordiæ Hospital, which is distant from the prison some 300 paces. I have learnt that there was no case of cholera in this Hospital at the time that the disease broke out in the Mountjoy Prison; the last case admitted to that hospital was taken in on December 17th, and died on the 18th; for ten days before that there had been no case of cholera in this hospital.

Water Supply.—The water used in the prison is drawn from the reservoir from which the north side of the City of Dublin is supplied, it is conducted through iron pipes, and passing through a filter of gravel is received in a large supply tank placed at the highest part of the prison ground, remote from, and about twenty feet higher than the sewage tanks. From the supply-tank it is pumped by engine to the cistern on the top of the prison. As it enters the supply tank rather slowly through the filtering apparatus, it happens that the engine pumps it out more rapidly than the water flows in. The result is that at about four o'clock every day, the supply-tank is pumped nearly empty, and thus every twenty-four hours there is an entirely fresh supply of water drawn.

The female prison adjoining is supplied by water from the same tank, no case of cholera occurred in the female prison. I examined the water and have found it limpid and colourless. It is a water of as good quality as any supplied on the north side of Dublin; it is pleasant to drink, free from odour or taste, sufficiently soft and containing some saline matter, (magnesia and lime).

Food and Dietary—The bread, soup, milk, oatmeal, stirabout, &c., used in the prison appears to me to be of good quality; the steward and cook inform me that they consider the food supplied during the month of December of good average quality. The beef used for the soup, &c., is supplied at the contract price of 5½d. per pound (exclusive of bone), mutton 8d. per pound (not exclusive of bone). Bread 2·6 pence per two pound loaf.

The cooking is performed by a steam apparatus, and is carried on in large cast iron boilers kept scrupulously clean.

The untried political prisoners are permitted to get their own food sent in by their friends if they please; some half dozen only availed themselves of this privilege: one of those (who was not making use of any of the prison food at all) was among those attacked with bad choleraic diarrhœa.

Among the other prisoners two distinct dietaries were in use, as follows:—

DIET ON SATURDAY, DECEMBER 22ND, 1866.

	Untried prisoners and working convicts.	Convicts of probationary class.
Breakfast . .	bread and coffee,	stirabout and milk.
Dinner . :	½lb. beef, broth and 2lbs. of potatoes,	bread and milk.
Supper . . .	bread and milk,	bread and milk.

Cholera appeared simultaneously among the persons on these distinct scales of diet. As some have supposed that the milk was the special article of diet at fault, I have examined carefully into the circumstances concerning it. The milk supplied by the predecessor of the present contractor was of bad quality, it was supplied at the low figure 5½d. per gallon, it was frequently rejected, and finally the contract was broken. On September 6th, the milk contract was transferred to other hands at 10½d. per gallon. Since then the milk supplied has been of good quality, (it was, however, on one occasion rejected October 5th, 1866).

I have frequently examined the milk, and have never found it to be adulterated with anything except water. The maximum of added water amounts to not more than 25 per cent: (usually much less than this) a dilution which, I do not consider warrants the rejection of milk, inasmuch

as the milk generally supplied throughout Dublin in private families is diluted to about this degree. In justice to the individual who at present supplies milk to this prison, (and of whom I may add, I know nothing), I feel bound to state that in my opinion the article furnished by him is good average milk.

Several of the Prison Officers from choice make use of this milk; from them I learn that they have had no fault to find with it—one of the prisoners who died of cholera had taken no milk the day before he was attacked, save the small quantity in his coffee which had been boiled.

Cases of cholera ocurred in each wing of the prison, no wing escaped; with one exception all those taken ill of cholera were in the upper stories, four were in the highest story, four on the second, and one below.

I examined the closets in the cells which had been occupied by each case, and found that all were in good order.

None of the prisoners attacked had been under the depressing influence of any special punishment by curtailed diet or otherwise.

The prison faces south-west, and the Mater Misericordiæ Hospital stands 300 paces in front (that is south-west) of it. During the days which the cholera lasted, the wind blew from the south-west almost continually. On the night of the first appearance of the disease, the atmosphere was fully saturated with moisture—the wet and dry bulb thermometers stood equal. I subjoin a table giving some particulars concerning the individuals attacked. Happily the efforts made to prevent the spread of the disease were eminently successful.

Infected clothes were burned, incipient cases promptly attended to, and every part of the Prison and Hospital disinfected with carbolic acid and solution of sulphate of iron, which were thrown into the closets and sewers.

TABLE OF CASES ATTACKED WITH ASIATIC CHOLERA DURING THE LAST WEEK OF. DECEMBER, 1866.

Name of Prisoner.	Reg. No.	Date of reception in this prison.	Place whence he came.	How long in the cell in which his illness commenced.	How long in this prison.	Number of cell and corridor. ‡	Whether premonitory diarrhœa existed, and how long?	Date of admission to hospital.	Termination of Case.
John K. ...	7238	Ap. 27, 1866	Lifford Gaol, co. Donegal	Nearly 8 months	8 months	C 2, 7 cell	No premonitory diarrhœa.	Dec. 23, 1866	Death at 10 that night.
Wm. M. ...	Untried	Sept. 1, 1866	Kilmainham Gaol	1 mth. & 27 days	4 ,,	A 2, 13 ,,	No premonitory diarrhœa.	,, ,, ,,	Death at 6 that evg.
J. M'C. ...	7255	July 9, 1866	Monaghan Gaol	2 mths. & 11 days	5 ,,	C 3, 37 ,,	Had diarrhœa for 48 hours.	,, ,, ,,	Death at 12 next day.
G. T. ...	6987	May 12, 1866	Spike Island Prison	4 months nearly	7 ,,	D 3, 45 ,,	Violent vomiting was the 1st symptom.	,, ,, ,,	Recovery.
*J. H. C. ...	7045	July 13, 1865	Londonderry Gaol	12 days	5 ,,	D 2, 41 ,,	Diarrhœa during night of 22nd.	,, ,, ,,	Recovery.
J. S. ...	7229	Ap. 12, 1866	Spike Island Prison	About 8½ months	8 ,,	D 2, 40 ,,	Diarrhœa on the 24th, not checked by treatment.	,, 26, ,,	Recovery.
†A. L. ...	7230	Ap. 17, 1866	Richmond Bridewell	About 1½ months	8 ,,	C 3, 32 ,,	1st symptoms violent vomiting and purging.	,, ,, ,,	Recovery.
John M. ...	7100	Nov. 4, 1865	Maryboro' Gaol	5 mths. & 20 days	13 ,,	D 1, 23 ,,	Collapse from the first, no premonitory diarrhœa.	,, 27, ,,	Death at 11 on night of 28th.
‡T. N. ...	Untried	Dec. 18, 1866	Clonmel Gaol	About 8 days	8 days	B 3, 18 ,,	Premonitory diarrhœa came on on the 25th; treatment did not check it, and vomiting supervened.	,, ,, ,,	Recover .

* During convalescence this patient was covered with a rash resembling measles.
† This patient was for 24 hours apparently hopelessly collapsed.
‡ This man had never, to his knowledge, been in contact with cholera. There had been no cholera in Clonmel for three months before his committal.
‡ A. B. C. and D. indicate the wings of the prison radiating from a centre; 1 indicates the lowest story; 2 the second; and 3 the top. No case of cholera had occurred among any of the prison officers or their families. The outbreak terminated within one week from its first appearance. There were 64 cases of diarrhœa reported on the first day of the outbreak; some of these were severe, and were attended with vomiting, but none are put down in this table save those who were in collapse.

SIR P. DUN'S HOSPITAL.

SUMMARY OF CHOLERA REPORT.

By E. W COLLINS, A.B.
RESIDENT MEDICAL SCHOLAR.

ELIZABETH MEYLER, in a short time after the death of her husband from cholera, sickened, and was brought to Sir P. Dun's Hospital (Aug. 2nd, eleven A.M.) twenty-four hours and a half after being attacked, and died sixty-three hours and a half after admission, after an illness of eighty-eight hours.

This was the first case which sought admission into Sir P. Dun's Hospital.

There were in all 180 cases of cholera treated in this hospital, dating from August 2nd, 1866. Of these 180 cases, the particulars of 148 are as follows:—

Symptoms, &c., in 148 cases.	Number of patients thus affected.	Percentage of patients thus affected.	Number of patients not thus affected.	Percentage of patients not thus affected.
Purging	142	95·94	6	4·06
Vomiting	130	87·83	18	12·17
Cramps	84	56·75	64	43·25
Collapsed on admission	74	50·	74	50·

Of these 148 cases 72 (48·64 per cent.) belonged to the male, and 76 (51·36 per cent.) to the female sex; 70 (47·29 per cent.) died, and 78 (52·71 per cent.) recovered. The average length of time which elapsed between the commencement of the illness of each of these cases, and their admission into hospital was 48·35 hours. Moreover, the entire duration of the disease in the cases of those who succumbed was, on an average, 79·34 hours. In other words, these patients lived, on an average, only 31 hours after they came into hospital. The order of constancy of the symptoms was, as may be seen, purging, vomiting, and cramps, the coefficients per cent. of each of these symptoms, respectively, being 95·94, 87·83, and 50·75. Diarrhœa, therefore, was all but uniformly present. Of the few cases, altogether six in number, in which it did not occur, 50 per cent died, and it may be mentioned as a singular fact, that all save one belonged to the female sex. Five out of the six had vomiting and cramps, and two were collapsed on admission. One suffered only from cramps, and she died, her illness proving fatal in six hours: when taken out of the cholera-van she was found to be dead. Another, a boy, æt. 6, who only laboured under vomiting, gradually exhibited the symptoms and signs of tubercular meningitis with effusion, of which he died 408 hours after admission; the autopsy verified the

diagnosis. The details of these cases which were characterised by absence of the most constant of all the symptoms of cholera are subjoined:—

TABLE CONTAINING THE DETAILS OF THE CASES IN WHICH THERE WAS ABSENCE OF PURGING.

Cases in which no diarrhœa occurred.	Vomiting.	Cramps.	Collapsed.	Length of illness in hours before admission.	Recoveries.	Deaths.	Period in hours of death after admission.	Females.	Males.	Ages.
1st	1	1	...	25	1	...	...	1	...	62
2nd	1	1	...	13	1	...	...	1	...	14
3rd	1	...	...	80	...	1	408	...	1	6
4th	...	1	1	6	...	1	0	1	...	22
5th	1	1	1	40	...	1	53	1	...	35
6th	1	1	...	24	1	...	...	1	...	40
TOTAL ...	5	5	2	...	3	3	...	5	1	...

Of the effect of mental emotions as predisposing causes, in the production of cholera, the following is a remarkable instance:—

Eliza Singleton, æt. 25, a fruit-seller, sold some apples from her stall to a woman who was one of her usual customers. In a few hours after a funeral passed by, which, on enquiry, she learned was that of the woman to whom she had sold the fruit in the morning, and that she had died of cholera. Such was the effect produced by this intelligence, that on the moment she took ill, and had to be removed to her home. Purging, vomiting, and cramps set in, and were rapidly followed by collapse. When brought to the hospital she was in a state of profound collapse, out of which she happened to be amongst the few who recovered. In another instance, a boy, aged five years, was admitted, labouring under an extraordinary presentiment that he should contract and should die of cholera, in consequence of the death of a playmate in the same house from the disease.

This child died, the disease running its fatal course in 23 hours. In two cases the commencement of the disease dated from the time of administration of a dose of ol. ricini. Errors of diet in a vast number of instances appear to be the predisposing causes. In a few rare cases, 5 in number, no vomiting or purging occurred during the stage of collapse, in which they were admitted, these cases all died. As a rule, the cramps attacked the muscles of the upper less frequently than those of the lower extremities. Still less frequently those of the abdomen were engaged. A great number of the cases admitted, suffered from suppression of urine in a greater or less degree. Coma was very frequently the precursor of death in the cases of suppression of urine, unaccompanied by any of the other signs of uræmic poisoning. One of these patients secreted no urine for 3 days. But the most extraordinary case of recovery with this complication was that of a man named Maguire, aged 40, who suffered from suppression 72 hours. Another case (that of John Arthur, æt. 30), in which, according to the patients own account, suppression had lasted for a corresponding period, was not attended with an equally favourable issue, death following at the close of the 4th day. In the case of a man, aged 39, suppression still continuing at the end of the 3rd day, blood to the amount of 4 ounces was taken from the arm, and in half an hour after he secreted and passed some urine. In another instance, however, though for the same complication, venesection was ineffectually tried. After suppression had existed for 60 hours, in another case dry cupping over the loins was tried, and 12 hours after the secretion returned. The cadaveric twitchings which occurred in several instances are worthy of special notice. The case of a boy named Villiers, aged 10, may be more particularly alluded to. In this instance about 5 minutes after breathing had ceased, and all other signs of animation had departed, slight tremulous spasmodic twitchings and quivering of the muscles were observed, especially of those on the inside of the thighs, legs, and feet, (so much so, indeed, that inversion, exversion, flexion, and extension were frequently performed, and the left foot was at one time raised about 3 inches from the bed on which it had been lying), of the abdominal, the pectorals, and of the muscles of the forearms and of the hands. These cadaveric movements shortly after death were also very remarkable in the case of a woman, Emma Louisa Consen: about 20 minutes after death, the muscles of all her toes, the same set of muscles which had been especially, during life, the seat of the cramps, were seen sometimes all together, sometimes one by one, to contract and relax. The patella also was frequently drawn up by the quadriceps extensor. The muscles of the abdomen visibly quivered and contracted. The blood was found to be of a thick black, and tarry consistence.

The general line of treatment adopted was to arrest the diarrhœa and vomiting as soon as was possible, by the administration of astringents and sedatives. For these purposes acetate of lead and opium were exhibited. In cases where these remedies failed to moderate the diarrhœa injections of acetate of lead aud opium, to the extent of fifteen grains of the former with half a drachm of the acetons tincture of opium, were employed generally with marked effects. Dr. Kennedy's patients immediately after their admission got a mustard emetic. Where vomiting was the prominent symptom, Hydrocianic acid (dilute) in variable amount to the extent of seven drops was exhibited singly, or in combination with Schachts' solution of bismuth. For the same purpose acetate of lead, spearmint water, sinapisms to the epigastrium, and mustard emetics were employed. To relieve the cramps manual friction, chloroform inhalations, turpentine stupes, sinapisms, and in some cases immediate blistering, were the means adopted. It was in those cases in which the cramps were unusually severe that chloroform inhalations appeared to be attended with the best results. In and previous to the stage of collapse stimulation was resorted to, both externally and internally. Externally by sponging with powerfully stimulating liniments of compound camphor liniment and chloroform, by the employment of manual friction, by dry heat, (by means of hot jars and heated sand), and by swathing the body and limbs in flannel. Internally by the exhibition of brandy, wine, mustard emetics (Kennedy), and camphor and chloroform in solution (Banks). When suppression of urine supervened this was combated by hot stupes of turpentine to the hypogastric region, by dry and wet cupping over the loins, and in some rare cases by venesection. In some cases, though urine was secreted, it was retained in the bladder; in these cases the catheter afforded relief. The solution of the permanganate of potash was given internally by Dr. Moore in a few instances, but its use was soon discontinued. Calomel also was similarly tried by Dr. Kennedy with little efficacy.

The mortality among the patients bore a direct proportion to the length of time they lasted after admission. Thus, amongst those who came into the Hospital, the greatest mortality occurred within the twelve hours succeeding the admission, 21 per cent, or one-fifth of all the patients admitted having died within that time. More than one-third (37·57 per cent.) died within 36 hours, somewhat less than one-third (31·21 per cent.) within 24 hours, and, as before stated, one-fifth (21·02 per cent.) within 12 hours after admission; one-fifth (21·02 per cent.) died between the 1st and the 12th hours (inclusive), one-tenth (10·19 per cent.) between the 13th and the 24th (inclusive), and one-sixteenth (6·36 per cent.) between the 25th and the 36th hours subsequent to admission. The following is a return, in a statistical form, of those cases—58 in all—which died 36 hours after admission:—

Hours after admission (inclusive).	Deaths.	Per centage of deaths, in relation to the total number of deaths (72).	Per centage of deaths, in relation to the total number of cases admitted (157).
12	33	45·83	21·02
24	49	68·05	31·21
36	58	80·55	37·57
Between 1st and 12th	33	45·83	21·02
,, 13th and 24th	16	22·22	10·19
,, 25th and 36th	9	12·50	6·36

The particulars of these cases are subjoined:—

Time of the Deaths after Admission in Hours.	Under the care of Dr. Moore.	Under the care of Dr. Kennedy.	Under the care of Dr. Banks.	Males.	Females.
0	1	...	...	...	1
½	1	...	...	...	1
1	...	...	1	1	...
2	1	...	2	2	1
2½	...	1	...	1	...
2¾	2	...	...	1	1
4½	1	...	...	1	...
6	...	2	3	2	3
7½	...	1	...	1	...
8	1	...	1	...	2
8¼	2	...	...	...	2
8½	2	...	...	2	...
9	2	...	...	...	2
9¾	...	1	...	1	...
10	1	...	1	1	1
11	1	...	1	...	2
11½	...	1	...	1	...
11¼	...	...	1	1	...
12	2	...	...	...	2
12¾	...	1	...	...	1
13	1	2	...	2	1
13½	...	1	...	...	1
14	1	...	...	1	...
14½	1	...	...	...	1
15	1	...	...	...	1
17	1	...	...	...	1
18	1	...	...	...	1
20	1	...	...	...	1
21¾	...	1	...	1	...
22	1	1	...	2	...
24	1	1	...	...	2
24½	...	...	1	1	...
26	...	1	...	...	1
27	...	1	...	1	...
29	...	1	...	1	...
30	1	...	...	...	1
31½	1	...	...	...	1
32½	1	...	...	1	...
33	1	...	...	...	1
36	...	...	1	1	...
Totals...	30	16	12	26	32

It will be seen from the foregoing table that, of those who died within 36 hours after admission, an unusually large number fell to the lot of Dr. Moore, a fact which accounts for the high coefficient of mortality (50 per cent.) of the patients who came under his charge.

It has been stated that the greatest mortality in cholera occurs at the extremes of life, among the very old and the very young. The truth of this may be tested by the following return of the cases between the ages of 1 and 79 (inclusive):—

Ages (inclusive.)	Recovered.	Died.	Males.	Females.	Total number of cases.	Per centage of deaths amongst those attacked.
1 to 9	17	12	16	13	29	41·38
10 ,, 19	17	10	14	13	27	37·03
20 ,, 29	18	13	14	17	31	41·93
30 ,, 39	9	13	13	9	22	59·09
40 ,, 49	7	12	8	11	19	63·15
50 ,, 59	4	6	3	7	10	60·
60 ,, 69	2	4	2	4	6	66·66
70 ,, 79	1	...	1	...	1	.....
TOTAL...	75	70	71	74	145	48·27

The return shows that, of the patients admitted into Sir P. Dun's Hospital, the greatest mortality occurred amongst those between the ages of 60 and 69, and 40 and 49 inclusive), the best amongst those between the ages of 10 and 19 and 1 and 9 respectively (inclusive). The epidemic spared neither age nor sex. The mortality amongst each sex was almost alike; each was alike obnoxious to the poison.

Sex.	Died.	Recovered.	Total number admitted.	Percentage of those who died.	Percentage of those who recovered.	Percentage of the total number of cases admitted.
Females ...	44	50	94	51·76	52·63	52·22
Males ...	41	45	86	48·24	47·37	47·78
Total...	85	95	180	100.	100	100

Of 180 cases admitted into this hospital, 94 (52·22 per cent.) belonged to the female, and 86 (47·78 per cent.) to the male sex. Of the former 44 (51·76 per cent.) died, and 50 (52·63 per cent.) recovered. Of the latter 41 (48·24 per cent.) died, and 45 (47·37 per cent.) recovered. Thus the coefficients of mortality of the sexes only differed in the trifling sum of 3·52 per cent.

Again, if the time during which the epidemic of cholera prevailed—from August 2nd, 1866, to January 1st, 1867 (inclusive)—be divided into five periods of a month each, the coefficients of mortality for each of these periods in their order, and finally, the total coefficient of mortality of the patients admitted into this hospital, will be found in the annexed table.

The coefficients of mortality:—

Monthly periods.	Admission.	Deaths.	Recoveries.	Coefficients of mortality per cent.
First, (August 2nd to Sept. 1st).	22	12	10	54·54
Second, (Sept. 2nd to Oct. 1st).	51	25	26	49·01
Third, (Oct. 2nd to Nov. 1st).	77	35	42	45·45
Fourth, (Nov. 2nd to Dec. 1st).	27	13	14	48·14
Fifth, (Dec. 2nd to Jan. 1st).	3		3	
Total...	180	85	95	47·22

From this table it may be seen, as has been elsewhere observed, that the earliest cases of cholera were by far the most fatal. The coefficients of mortality steadily decreased during the 1st, 2nd, and 3rd monthly periods, but rose again upon the 4th to almost the same rate as during the 2nd.

The general line of treatment adopted by each of the physicians who had charge of the hospital during the prevalence of the epidemic was practically almost the same. It would, therefore, be predicated that there would be little variation in the coefficients of mortality of the patients under each, and such, indeed, was the fact. For, the high rate of mortality amongst the patients of Dr. Moore may be fairly attributed to the large proportion of the rapidly fatal cases which came under his charge. And, with regard to the low coefficient of Dr. Banks, who succeeded Drs. Kennedy and Moore on November 1st, it must be borne in mind that the epidemic was then on its decline. The following table shows the number, and the coefficients of mortality and of recovery, of the patients under each of the physicians:—

The Physicians.	Admissions.	Deaths.	Recoveries.	Coefficient of Mortality per cent.
H. Kennedy, M.D.	79	37	42	46·83
W. Moore, M.D.	70	35	35	50.
J. T. Banks, M.D.	31	13	18	41·61
Total ...	180	85	95	47·22

It only remains to notice the dimensions of the cholera wards:—

The Cholera Wards.	Height (in feet and inches.)	Length (in feet and inches.)	Breadth (in feet and inches.)	Number of cubic inches of air in each ward.	No. of beds in each ward.	Number of cubic inches of air to each patient.	Number of cubic feet of air to each patient.
Female.	19·3	37·3	29·8	36,759,492	8	4,594,936·5	2,659·10
Male.	20·1	37·6	29·6	37,391,300	8	4,673,912·5	2,704·86

These wards, set apart at a time when the epidemic had not yet reached this city for those who might suffer from this disease, were each capable of containing 36,000,000 cubic inches of air. Each ward—that allotted to the females and that to the males—had eight occupants. Each of these, therefore, was allowed four and a-half million cubic inches, or two and a-half thousand cubic feet, of air. To this fact may be traced the good health of those who attended on the sufferers, and, in a great measure, the recoveries of those who suffered from the epidemic.

MATER MISERICORDIÆ HOSPITAL.

ABSTRACT OF REPORT ON CHOLERA.

By Dr. Hayden and Dr. Cruise.

DURING the prevalence of the late epidemic, 197 cases of cholera were treated in this hospital; of these a total of 106 proved fatal, and 91 recovered. Of cases in the first stage of cholera, or *Choleraic Diarrhœa* there were admitted 54, of these 52 recovered and 2 died.

Of cases in the second stage of cholera, or *collapse*, there were admitted 124, of these 85 died and 39 recovered.

These numbers do not include 19 cases which were admitted in a moribund state, and beyond hope from treatment.

The following tables exhibit the foregoing statements in detail:—

TABLE I.

Week ending	No. of Cases.	Average duration of illness in hours.	Average period in Hospital, in hours.	Result.		Percentage of deaths.
		H. M.	H. M.	DIED.	RECRD	
1. August 21	1	600 ... 0	432 ... 0	0	1	
2. August 28	4	47 ... 0	34 ... 45	2	2	
3. Sept. 4	13	109 ... 13	75 ... 41	3	10	
4. Sept. 11	18	66 ... 9	42 ... 41	10	8	
5. Sept. 18	13	139 ... 34	94 ... 28	6	7	
6. Sept. 25	30	89 ... 14	55 ... 14	19	11	
7. October 2	17	92 ... 39	72 ... 50	6	11	
8. October 9	22	82 ... 19	54 ... 29	14	8	
9. October 16	16	62 ... 58	43 ... 42	11	5	
10. October 23	21	53 ... 42	96 ... 8	10	11	
11. October 30	11	120 ... 12	69 ... 43	5	6	
12. Nov. 6	9	127 ... 6	96 ... 33	3	6	
13. Nov. 13	11	75 ... 32	57 ... 18	9	2	
14. Nov. 20	7	28 ... 12	16 ... 51	6	1	
15. Nov. 27	2	91 ... 7	76 ... 7	1	1	
16. Dec. 4	1	84 ... 0	52 ... 0	0	1	
17. Dec. 11	0	0 ... 0	0 ... 0	0	0	
18. Dec. 18	1	26 ... 0	19 ... 0	1	0	
TOTAL ...	197	105 ... 16	77 ... 11	106	91	53·8

TABLE II.

Number of cases in which attack was due to any assignable cause, not including infection—92.

CAUSES ASSIGNED.		PER CENTAGE.
Neglected Diarrhœa .	65	33·0
Intemperance . .	18	
Foul water . .	2	
Meal of cockles . .	1	
Sour porter . .	1	
Meal of cold cabbage .	1	
Do. of fish . .	1	
Do. of pork . .	1	
Do. of badly cooked cabbage	1	
Dentition . . .	1	
	92	

TABLE III.

AGES OF PATIENTS WITHIN DECENNIAL PERIODS, AND RESULT.

Age under 10 years	No. of cases.	Died.	Recovered.	Per cent. mortality.
10 to 20	37	20	17	54·0
20 to 30	27	9	18	33·3
30 to 40	47	19	28	40·4
40 to 50	35	22	13	62·9
50 to 60	26	19	7	73·7
60 to 70	14	12	2	85·7
70 to 80	7	3	4	42·85
	4	2	2	50·0
	197	106	91	

TABLE IV. A.

AGES OF PATIENTS WITHIN DECENNIAL PERIODS ADMITTED IN STAGE OF CHOLERAIC DIARRHŒA—SUMMARY OF TREATMENT AND RESULT.

Age.	No. of cases.	TREATMENT.	Died.	Recovered.	Per centage.
Under 10 years	6	* Dilute sulphuric acid and opium, creasote-water. *ad libitum* .	...	6	
,, 10 to 20	7	6 dilute sulph. acid and opium; 1 chalk mixture . . .	...	7	
,, 20 ,, 30	19	12 do. do. do. in 1 this was preceded by a draught of castor oil, and in another it was followed by calomel given as stated below; 1 case got tinct. opium m x. in an ounce of brandy, calomel was then given, followed by bismuth and chlorodyne draughts; in 1 case a draught of oil with tinct. opii., and creasote-water for drink; in 4 cases purgatives were given, and 1 was treated expectantly	...	19	
,, 30 ,, 40	10	In 1 case acid and opium mixture with creasote, and external heat constituted the treatment; 4 acid and opium; 1 calomel and creasote; 2 chalk mixture; 1 expectant . . .	...	10	
,, 40 ,, 50	4	In 1 tinct. opii., with nit. spirit ether and camph. mixture was given, preceded by draught of c. oil; in 1 oil draught followed by calomel in usual doses; 1 chalk mixture; 1 acid astringent do.	1	3	3·7
,, 50 ,, 60	2	Acid astringent mixture	...	2	
,, 60 ,, 70	4	1 acid astringent mixture; 1 calomel followed by bismuth, chlor. ether, and tinct. opii. in camphor mixture; 2 chalk mixture .	1	3	
,, 70 ,, 80	2	1 chalk mixture; 1 spir. am. aromat. with laudanum . .	...	2	
Total...	54				

* The mode of administration of sulphuric acid was usually as follows:—10 to 15 drops or more of the dilute, or of the sulphuric acid and with 5 drops of laudanum, and frequently 5 drops of tincture of capsicum, myrrh, or camphor, in an ounce of water, given after each evacuation.

TABLE IV. B.

AGES OF PATIENTS WITHIN DECENNIAL PERIODS ADMITTED IN STAGE OF COLLAPSE (*Algid Cholera*): SUMMARY OF TREATMENT AND RESULT.

Age.	No. of cases.	TREATMENT.	Died.	Recovered.	Per centage.
Under 10 years	26	21 calomel, in 3 of which concentrated solution of camphor was likewise given, and in 2 of them also inhalations of the nitrite of amyl; in 1 the warm bath; 4 diffusible stimulants, and in 1 of them also amyl inhalations; 1 arsenic; sinapisms and creasote-water	15	11	12·1
,, 10 to 20	19	13 calomel, and in 2 of these bismuth, &c., draughts; 2 quinine (1 with chloric ether); 2 stimulants; 4 diffusible stimulants, with effervescents; 1 digitalis, with spirit of juniper and nit. sp. of ether	7	12	5·64
,, 20 ,, 30	25	21 calomel (in 4 preceded by dose of castor oil), and in 9 of these bismuth and chlorodyne, draughts, &c.; oxygen inhalations in 2 cases, and n. amyl in 1; venesection in 1; 2 got diffu. stim. and effervescents; 1 belladonna and permanganate of potass; and 1 arsenic,	17	8	13·7
,, 30 ,, 40	19	15 calomel, with sinapisms, heat, and friction; of these 3 got brandy, 1 spt. camphor, and 1 amyl inhalations; 1 permang. potass.; 1 hyposulphite of soda, with digitalis and dry cupping; 2 stimulants,	16	3	12·9
,, 40 ,, 50	20	14 calomel, and in 5 of these bismuth, creasote, and morphia also, after each dose of calomel; camphor in 2; amyl inhal. in 1, and oxygen do. in 1; castor-oil before the calomel in 2; in 2 digitalis, with n. s. ether; and in 2 stimulants	16	4	12·9
,, 50 ,, 60	10	9 calomel; in one of these bismuth draughts; 1 hyposulph. sodæ; and in 1 oxygen inhalations	10	0	8·0
,, 60 ,, 70	3	2 diffusible stimulants; 1 calomel	2	1	1·61
,, 70 ,, 80	2	2 calomel; in 1 of these diffusible stimulants also	2	0	1·61
Total ...	124		85	39	68·5

Calomel was given as follows—viz., gr. x. were given at once, and subsequently gr. ii. every hour. In the case of children, the doses were reduced in proportion to the age. In the event of the stomach rejecting the calomel, a draught, consisting of liquor. bismuth. with chlorodyne, was given after each dose. In cases in which the stomach still continued to reject the mercurial in this form, it was administered by inunction or suppository. The drink given was creasote water (m. iii. to a pint of water) *ad libitum*. The nitrite of amyl was administered by inhalation in several cases, with the result of a slight but temporary elevation of temperature; oxygen was likewise similarly given in some cases, but with no marked beneficial result.

Post-mortem Appearances in Collapse.

General condition of body—The post-mortem rigidity of very short duration; lividity less marked than before death; in some cases temperature raised.

Cerebro-spinal system—Cerebral veins and sinuses engorged with dark liquid blood; in cerebral ventricles and subarachnoid spaces, a small quantity of clear serum; puncta cruenta large and numerous; spinal cord and membranes normal.

Ganglionic system—Solar plexus and similunar ganglia normal.

Thorax—Lungs conjested but still crepitant; right cavities of heart filled with dark uncoagulated blood; left auricle and ventricle contracted and empty. The latter much reduced in size, and its walls thickened.

Abdomen—Liver, spleen, and kidnies normal; peritoneal investment of viscera white and polished; mesenteric glands considerally enlarged. Stomach containing a small quantity of gruel like fluid; mucous lining of vesophagus prolapsed into stomach, and presenting the appearance of wet parchment; mucous lining of stomach, mamillated; intestinal canal nearly filled with a fluid like thin boiled starch mixed with white floculi. Brunner's glands enlarged; both solitary and agminate glands enlarged and filled to distension with opaque fluid; mucous lining vascular in jejunum and upper part of ileum; towards termination of ileum Payer's patches were in a state of erosion, the contents of the glandules having escaped through small apertures, visible on the surface. The fluid contents of the glandules, examined under the microscope, were found to consist of large granule cells, and amorphous granular matter.

Larynx—Vocal cords thickened and ventricles reduced in size, but without vascularity.

Diffusion of Cholera—In no instance did the disease spread in the Hospital, although, during the whole continuance of the epidemic, many were fully exposed. Of these we may especially mention the Sisters in charge of the wards—the Medical Officers, the clinical clerks—the class—the ward maids and porters engaged in carrying up the sick and removing the dead. One woman, in one of the general wards, took cholera and died; upon full investigation the origin of her case was clearly traced to an infected lodging-house in which she had stopped previous to entering the Hospital.

Disinfection, Ventilation, &c.—The *excreta* of the patients were promptly disinfected by means of chloride of lime and carbolic acid. Thorough ventilation was scrupulously attended to. The patients generally had a breathing space of more than 2000 cubic feet.

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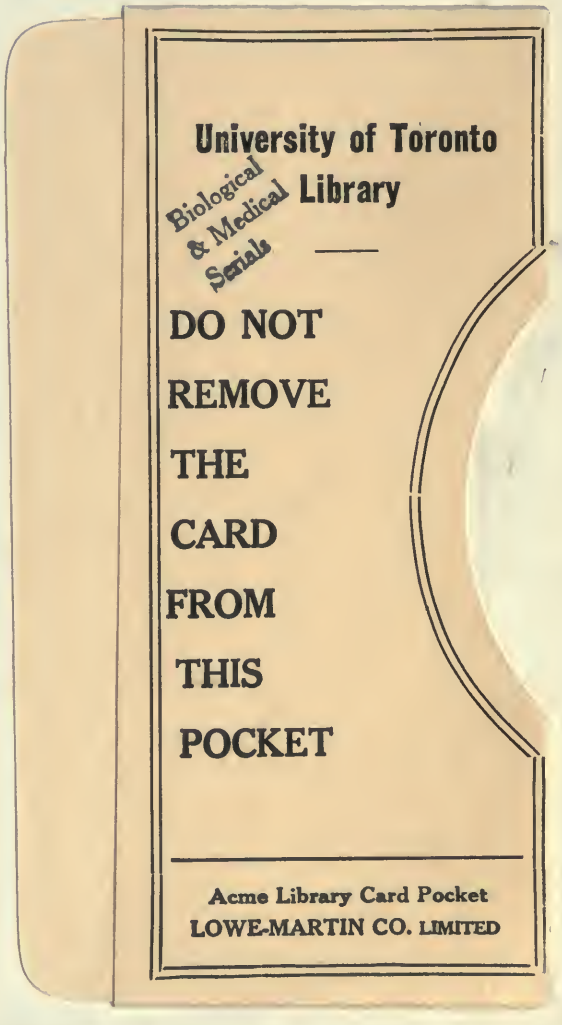
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